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The Effect Of Organizational Violence Prevention Climate And Workplace Aggression Within Schools: An Investigation Of Burnout Syndrome In Teachers And The Moderating Effect Of Locus Of Control, Communal Orientation, And Violence Prevention Climate

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THE EFFECT OF ORGANIZATIONAL VIOLENCE PREVENTION CLIMATE AND WORKPLACE AGGRESSION WITHIN SCHOOLS: AN INVESTIGATION OF BURNOUT SYNDROME IN TEACHERS AND THE MODERATING EFFECT OF LOCUS OF CONTROL, COMMUNAL ORIENTATION, AND VIOLENCE PREVENTION CLIMATE

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DEDICATION

The well-known African proverb "it takes a village to raise a child," is evidenced in my life's journey through academia. The many influences of teachers, family, and friends that have helped shape me into the critical thinker that I am today are my most cherished possessions. In honor of the "village" that selflessly contributed to my educational endeavors over the past 30 years, I dedicate this Master's Thesis to them. Specifically, I would like to dedicate this to my parents: Darrillyn and Stanley Childress, two outstanding educators who stopped at nothing to ensure that I understood the importance of learning and embraced the value of education, and were instrumental in my data collection; my brother, Imari Childress- a brilliant mind, who encouraged me to always think beyond the books; my sister, Damali Sahu, who was always an example of success and poise; and the matriarchs of my family, without whom none of this would be possible: Mozelle Jones (may she rest in peace) and Effie Mae Childress. Thank you!

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CHAPTER 1

Introduction

Student educational achievement is the primary goal of organized school systems. The most salient factor in obtaining that goal is the ability of schools to select and retain a quality teaching staff. A Louis Harris poll of 2,500 Americans assessed the importance of a wide variety of measures for lifting student achievement (Haselkorn & Harris, 2001). Respondents placed well-qualified teachers as second only to making schools safe from violence (Haselkorn & Harris, 2001). In light of tragedies, such as 2012 school shooting massacre at Sandy Hook Elementary School in Newtown, Connecticut, it is painfully clear that violence within our nations' schools is still a major concern. The core mission of all schools to educate students relies most heavily on the educators- who, unfortunately, are leaving the profession at an alarming rate (Useem, Offenberg, & Farley, 2007). The current study indirectly links both factors by investigating the relationship of school aggression to teacher burnout. Teachers who experience burnout related to workplace aggression are more likely to engage in withdrawal behaviors such as voluntary turnover (Vanderslice, 2010).

The Michigan Task Force on Ensuring Excellent Educators convened throughout 2001-02 to discuss the retention of quality educators (amongst other topics), and to address the current state of affairs in Michigan public schools. Of note, the gaps that exist in teacher quality across Michigan, particularly in schools with chronically underachieving students, was a pertinent issue. The overwhelming state-wide problem of teacher attrition prevents schools from staffing well-seasoned teachers who may be better equipped to deal with issues such as school aggression. The problem of high teacher

turnover rates is not one that is unique to Michigan. The national teacher annual turnover rate was 16.8 percent in 2007 (Carroll, 2007). The teacher dropout rate in urban schools was over 20 percent in the last five years, and, in some schools and districts, the teacher dropout rate was actually higher than the student dropout rate (U.S. Dept of Education, 2005). Between the years of 1994 and 2004, although 2.25 million new teachers were hired in the U.S., 2.7 million teachers exited the profession- with over with over 2.1 million of them leaving before retirement (Useem et al., 2007). In 2007, these reported teacher turnover rates cost the nation an excess of an estimated $7 billion (Carroll, 2007). In Detroit, MI for the year 2007, annual costs associated with teacher turnover were $26,565,000 (Carroll, 2007). So at the organizational level, there is a heavy price to pay for the failure to retain educators within our schools. Not only is the loss of teachers a hindrance to providing students a quality education, it literally translates into an organizational cost at the individual school and district levels.

So what is it, exactly, that is causing good teachers to exit the profession and/or transfer out of districts where qualified teachers are needed the most? Exhaustion, especially in districts wrought with school-place aggression, may be a leading contributor to teacher turnover (Lee & Ashforth, 1996; Vanderslice, 2010). Burnout, which captures this state of persistent exhaustion experienced by employees due to working conditions, is not a new topic within the organizational and educational literature (see Bentley & Remble, 1967; Gil-Monte, Carlotto, & Câmara, 2011; D'arienzo, Murraco, & Krajewski, 1982; Ha, King, & Naeger, 2011; Humphrey & Humphrey, 1981; Wu, Li, Wang, & Gao, 2011). Some of the previously studied antecedents of burnout in teachers include organizational citizenship behaviors (Talebpour, Emami, Bahmanpour, & Nasiri, 2012),

role conflict, role ambiguity, work overload (Ha et al., 2011), organizational tenure (Montero-Marin, 2011), and job satisfaction (Moya-Albiol, Serrano, & Salvador, 2010). In the current study, I add to this body of literature by using the Job Demands-Resources Model (JD-R) as a theoretical framework (Demerouti, Bakker, Nachreiner, Schaufeli, 2001), to propose that workplace aggression (physical and psychological) is an antecedent of teacher burnout.

According to the Job Demands-Resources Model (JD-R), job demands (which lead to the exhaustion component of burnout) refer to "those physical, social, or organizational aspects of the job that require sustained physical or mental effort and are therefore associated with certain physiological and psychological costs (e.g., exhaustion)" (Demerouti et al., 2001, p. 3). In the current study, school aggression is conceptualized as a job demand. Another main component of the JD-R is *job resources*, which refer to "those physical, psychological, social, or organizational aspects of the job that may do any of the following: (a) be functional in achieving work goals; (b) reduce job demands at the associated physiological and psychological costs; (c) stimulate personal growth and development" (Demerouti et al., 2001, p.3). The JD-R proposes that a lack of these resources leads to the disengagement component of burnout. Although the JD-R does not include the link between *personal* resources and burnout, it has been postulated in the literature that they also have a relationship with burnout, such that they may act as a buffer between job demands and burnout (Bakker, Van Der Zee, Lewig, & Dollard, 2006; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007).

High needs districts may benefit the most from identifying teachers with qualities that lead them to be more resilient to the presence of aggression in the school environment. In

school systems that are characterized by large percentages of underachieving students and disciplinary issues, parents and administrators have been found to hold less positive perceptions of school safety climates (Farmer, 2008), most likely because these schools report higher levels of school aggression. These perceptions may, similarly, be held by teachers within these populations. Identifying qualities within teachers that make them more resilient to aggressive incidents is also important, even outside of districts with at-risk student populations.

As mentioned above, Xanthopoulou, Bakker, Demerouti, and Schaufeli (2007) found further evidence that individual and/or organizational resources can act as buffers between job demands and burnout. School organizations may benefit from identifying individual differences in teachers that help them avoid becoming burned out in the face of job demands, such as workplace aggression. In the current study two individual difference variables, Locus of Control (LOC) and Communal Orientation, are hypothesized to moderate the relationship between workplace aggression and burnout. Contextual variables within schools may also moderate the relationship of aggression and teacher burnout. These factors are conceptualized a personal resources that can buffer the negative effects of workplace aggression on burnout. Violence climate (also referred to as organizational violence prevention climate; VPC) refers to the amount of perceived emphasis organizations place on "control and elimination of violence and verbal aggression" (Spector, Coulter, Stockwell, Matz., 2007, p. 120), and can be considered an organizational resource within a school. Therefore, in line with the JD-R, I hypothesized that VPC also acts as a moderator of the relationship between workplace aggression and teacher burnout. If violence prevention climates are perceived as strong (positive), they

may have a buffering effect on the aggression-burnout link. As resources, both this contextual variable (VPC) and the aforementioned individual differences (LOC and communal orientation) may act as buffers between workplace aggression and burnout in teachers (formal hypotheses stated below). This study makes a novel contribution in that VPC, LOC, and communal orientation have not yet been studied as moderators of the relationship between workplace aggression and burnout in teachers. Next, I review the literature on workplace aggression (including *workplace violence*). Then, I discuss the hypothesized moderators: VPC, LOC and communal orientation.

Burnout

Burnout is a psychological concept that describes a condition of persistent exhaustion and the eventual decline of involvement in one's work due to work stress. The concept of burnout stems from the occupational stress literature and originally was thought of as uniquely experienced by professionals in service-oriented jobs. Individuals in human service positions were seen as more prone to experience burnout because of the often high energy demands of interacting with customers, clients, patients, students, etc. (Freudenberger, 1974; Maslach, 1976). It has now been extended beyond the domain of service professionals, and is applied more broadly. The general structure of burnout syndrome has been found to be relatively invariant across different occupations (Demerouti et al., 2001). Absenteeism, performance, citizenship behaviors, and turnover (e.g., Halbesleben & Buckley, 2004; Lee & Ashforth, 1996; Swider & Zimmerman, 2010; Taris, 2006) have all been found to be related to burnout.

Burnout has been conceptualized to manifest in three physical and psychological domains: *emotional exhaustion*, *cynicism* (also referred to as depersonalization), and

reduced personal accomplishment (also referred to as reduced professional efficacy) (Maslach & Schaufeli, 1993). "Being over-extended and depleted of one's emotional resources" in response to "chronic interpersonal stressors on the job" (Maslach, Schaufeli, & Leiter, 2001, p. 399), is captured by the *emotional exhaustion* dimension of burnout. Physical fatigue, tension, anxiety and even insomnia have been linked to this dimension (Perlman & Hartman, 1982). The *cynicism* dimension, as defined by Maslach and colleagues (2001, p.399) refers to "negative, callous, or detached response to various aspects of the job." According to Kahill (1988), depersonalization (*cynicism*) is a mechanism that employees use to halt the depletion of their own emotional resources by "treating clients as objects rather than as people." In an environment where the "clients" are students, this halting of emotional resources by teachers can lead to negative interactions between teachers and students, namely because of the disengaging behavior that accompanies this cynicism. The *decreased personal accomplishment (efficacy)* dimension of burnout refers to a "decrement in one's self-efficacy of successful achievement in the work environment" (Maslach et al., 1993, p.21).

More recently, Demerouti and colleagues (2001) developed the Job Demands-Resources model of burnout which focused on only two dimensions of burnout in relation to job demands and resources, *exhaustion* and *disengagement from work*. Only these two dimensions were chosen because they are usually considered to be the core dimensions of burnout (Green, Walkey, & Taylor, 1991). In addition, not only does the third dimension of the original construct, reduced personal accomplishment, display the weakest relationships with other variables related to burnout (Lee & Ashforth, 1996; Schaufeli & Enzmann, 1998), but it also has lower correlations with the other two dimensions than

they do with each other (Lee & Ashforth, 1996). Taken together, emotional exhaustion and disengagement (cynicism) can be considered a syndrome (Demerouti, et al., 2001) and according to the research of Lee and Ashforth (1996), reduced personal accomplishment is a related variable, but not part of the actual burnout *syndrome.* The traditional dimensions, emotional exhaustion and depersonalization (cynicism), respectively map onto general *exhaustion* and *disengagement* in the JD-R model (Demerouti et al., 2001). Demerouti and colleagues (2001) make the argument that the formerly conceptualized dimensions are specific manifestations of the more general constructs of exhaustion (both physical and mental) and disengagement. The JD-R model of burnout (Demerouti et al., 2001) was tested across three different occupational groups (human services, industry, and transport) and showed strong positive relationships between job demands and exhaustion, as well as a strong negative relationship between job resources and disengagement from work.

The JD-R model posits that two processes lead to experienced burnout syndrome. In the first, overwhelming job demands lead to exhaustion through the taxing of employee energies. Demands may be conceptualized as *stressors*. Stressors are factors in the work environment that require employees to adaptively respond to alleviate the stress they may impose- which, when left unattended, may lead to experienced strain (Spector & Jex, 1998). Workplace aggression has been identified as a stressor that causes short-term emotional, behavioral and physiological responding of its recipients (Beehr & Newman, 1978; Caplan, Cobb, French, Van Harrison, & Pinneau, 1975). The increased job demands created by working in a physically and psychologically aggressive school can deplete essential resources teachers need to avoid negative outcomes such as burnout.

Workplace stressors related to aggression have been linked to lower levels of job satisfaction (Budd, Arvey, & Lawless, 1996), as well as intent to turnover (LeBlanc & Kelloway, 2002; Rogers & Kelloway, 1997). In terms of the JD-R model, workplace aggression is a job demand that can eventually lead to burnout. The second JD-R model process postulates that [lack of] organizational resources can lead to disengagement. The attempt to preserve energy stores through disengaging from a stressful work environment can be considered a self-protection (coping) strategy (Demerouti et al., 2001).

Burnout has serious consequences for not only the employees who experience it, but for whom they interact with as well. Among the many consequences of burnout, sense of failure, depression, decline in the quality of help, reduced productivity, absenteeism and turnover (Cordes & Dougherty, 1993; Leiter & Maslach, 1988; Shirom, 1989) are some that may affect the ability of teachers to successfully carry out their job responsibilities. Of the withdrawal behaviors associated with burnout, absenteeism and turnover (Halbesleben & Buckley, 2004; Lee & Ashforth, 1996; Swider & Zimmerman, 2010; Taris, 2006), have some of the most detrimental consequences of burnout- as they leave students without qualified teachers in the classroom. Research supports this notion: teachers who suffer from burnout are also far more likely to leave an organization than those who do not (Lee & Ashforth, 1996; Vanderslice, 2010).

Workplace Aggression

Baron (1977) defines aggression as any form of behavior with the intent to harm or injure another living being in ways which the intended target is motivated to avoid. Baron's (1977) conceptualization of aggression includes both verbal and physical forms. Baron and Neuman (1996) applied the concept of aggression to the work environment

and described *workplace aggression* as any form of behavior by one or more people in the organization that has the goal of harming one or more persons within that organization. Physical aggression that occurs within the work environment is also called *workplace violence.* Workplace aggression can be conceptualized as a stressful job demand that requires elevated levels of energy and effort from teachers to cope with. Workplace aggression plays a role in forming employee perceptions of organizational violence climates; with high levels of evident workplace aggression likely leading to perceptions of weak violence prevention climates.

Workplace violence has not been widely examined in the Industrial Organizational Psychology literature (Magnavita & Heponiemi, 2011; Taylor & Rew, 2011). Yet because research has found workplace violence to be associated with outcomes such as increased organizational costs, errors on the job, decreased job satisfaction, and employee turnover (Lanza, 2006; LeBlanc & Barling, 2005; Schat, Frone, & Kelloway, 2006), it should be a topic that we have interest in researching. Schools are types of organizations, and some in particular may be more likely to have to deal with issues of aggression. Workplace violence is more probable in schools with weak *violence prevention climates*, which I discuss in greater detail later. In schools with such climates, students are less likely to fear sanctioning by administration, and therefore may more frequently engage in aggressive behavior with other students and teachers. Faculty in schools with a low violence prevention climate may also not see their supervisors as a good source of support, when trying to perform disciplinary actions towards students, or possibly even other faculty. The likelihood that other faculty members would engage in aggressive behavior towards colleagues is also probably

increased in a school with a low violence prevention climate. Teachers immersed in this aggressive school environment may experience elevated stress levels which could lead to increases in negative outcomes, like burnout.

This study includes workplace violence, synonymous with physical aggression, as a dimension of overall workplace aggression. Workplace violence experienced by employees from customers has been categorized as Type II violence; whereas Type III violence is that which is experienced between co-workers (Bruce & Nowlin, 2011). In this study, participants (teachers) were asked about both types of workplace violence and psychological aggression that they have been the targets of: that in which students are the perpetrators (Type II); and that in which other teachers were the perpetrators (Type III). A third type of ambient aggression will also be included- that which does not directly involve teachers, but occurs between students themselves. Typically, studies have only investigated Type II or Type III workplace violence (e.g. Braverman, 1999; Merchant & Lundell, 2001). Yet, it is also important to examine ambient aggression because if there is heavy presence of student versus student conflict within a school, it may likely be conceptualized by teachers as an additional job demand.

The Center for the Prevention of School Violence (2000) described school violence as "any behavior that violates a school's educational mission or climate of respect or jeopardizes the intent of the school to be free of aggression against persons or property, drugs, weapons, disruptions, and disorder." In line with this conceptualization, I examined psychological aggression as well as physical aggression within schools. In the current study, the job demand workplace aggression is composed of both components-

physical workplace aggression (workplace violence) and the more commonly experienced psychological (including verbal) aggression.

Psychological aggression also includes non-physical aggression that is not necessarily verbal, such as body posture and facial expressions (Schat et al., 2006; Schat & Kelloway, 2003). There is evidence that psychological aggression is more common in the workplace than physical violence (Gerberich et al., 2004; U.S. Postal Service Commission, 2000). In one study, roughly 39% of nurses reported experiencing psychological aggression at work, as compared to approximately 13% who reported being involved in physical workplace violence (Gerberich et al., 2004). Not only is it important to include psychological violence because of its prevalence, but also because it has been posited as a precursor for the occurrence of physical violence at work. Lanza et al.'s (2006) study on nurses showed that nurses who had experienced psychological workplace aggression were seven times more likely to subsequently experience workplace violence, as compared to those who had not encountered psychological aggression at work. These less obvious contributors to school safety perceptions have also been linked to student academic, personal, and social difficulties (Hazler, Hoover, & Oliver, 1996). Within the population of K-12 teachers in high-needs U.S. school districts, there may be frequent occurrences of psychological aggression from students to teachers that may influence negative outcomes within teachers. Although students may be more hesitant to engage in actual physical altercations with teachers, they may be less fearful of engaging in verbal aggression with teachers, especially if the school has a weak violence prevention climate. These aggressions can lead to physical aggression, if unchecked. To gain a better understanding of the relationships between both types of

workplace aggression and burnout in teachers, physical and psychological will be examined separately. The following is hypothesized about the relationship between workplace aggression and teacher burnout:

Hypothesis 1a: Physical workplace aggression (Type II, Type II, and ambient) will be positively related to teacher burnout syndrome.

Hypothesis 1b: Psychological workplace aggression (Type II, Type II, and ambient) will be positively related to teacher burnout syndrome.

Violence Prevention Climate

The concept of organizational climate generally refers to the 'shared perceptions of organizational policies, practices, and procedures' (Reichers & Schneider, 1990, p. 22). Strategic (specific) climate was proposed by Reichers and Schneider (1990), as a way to address the failure of the molar (broad) climate construct to predict specified outcomes. The introduction of the idea that [strategic] climates should be defined within specific boundaries represents the move towards "*climates for"* particular criterion/outcomes such as service (Schneider 1975, 1990), safety (Zohar, 2000), or the more recent organizational *violence prevention* climate (Yang et al., 2009).

It is important to mention that climate perceptions are measured at the individual level in the current study, as opposed to a group level aggregate. There has been dissension between researchers regarding the nature of organizational climate measures (Guion, 1973), as to whether or not they should measure organizational attributes or individual attributes. To resolve some of the confusion about the level of analysis organizational climate measured, the distinction was proposed between *organizational climate* and *psychological climate* (Hellriegel & Slocum, 1974; James & Jones, 1974).

Psychological climate refers to *individuals*' perceptions that represent the cognitive interpretations of the organizational context; not the organizational characteristics themselves. The psychological meaningfulness of individual perceptions in understanding organizational climates has become an intrinsic part of the climate construct (Rentsch, 1990). Considering this, the proposed research examines teachers' individual perceptions of violence prevention climate in their schools. Although teachers within the same school are all under the same violence prevention policies, their individual interpretation of the consequent climate is what most likely has the largest influence on burnout.

Welsh (2000) describes school climate as, "The unwritten beliefs, values, and attitudes that become the style of interaction between students, teachers, and administrators. School climate sets the parameters of acceptable behavior among all school actors, and it assigns individual and institutional responsibility for school safety" (p. 89). The conceptualization of "school climate" is somewhat different from organizational climate, in that it is proposed to include school safety. While school safety climate is a broader construct, it is important to measure the narrower construct of violence prevention climate. Organizational climate, by definition, does not inherently involve measures of organizational safety. Narrowing the boundaries of general school climate to *violence prevention* climate is helpful in predicting outcomes specific that construct (i.e. burnout).

Violence climate is defined as employees' perceptions of organizational policies, practices, and procedures regarding the control and elimination of workplace violence and verbal aggression (Spector, Coulter, Stockwell, & Matz, 2007). Spector et al. (2007)

posits that a positive violence climate is obtained when organizations uphold policies and procedures which not only prevent, but effectively manage physical violence and verbal aggressions. Spector et al. (2007) initially conducted a test of perceived violence climate on a sample of nurses and found that it predicted physical violence and verbal aggression against nurses. A more positive violence climate was associated with fewer occurrences of physical and psychological aggression. Violence climate was also found to predict anxiety, depression, and perceived workplace safety, even after controlling for their *actual* experiences with workplace aggression (Spector et al., 2007).

The Violence Climate construct was expanded by Kessler and colleagues (Kessler, Spector, Chang, & Par, 2008) to distinctly reflect its three components: "policies and procedures," which assesses employees' awareness of the formal organizational policies concerning the prevention of workplace aggression and violence; "practices and response," which captures employee perceptions of management's enforcement of those prevention policies, as well as their response to incidents of workplace aggression; and "pressure for unsafe practices," which measures perceived pressures to ignore policies concerning violence prevention climate in order to be productive. The violence climate construct has since been referred to as the "Organizational Violence Prevention Climate" (Yang, 2009). The term *violence prevention* climate (VPC) will be used in the current study to refer to this construct.VPC is an extension of safety climate, and describes employee perceptions of the extent to which their organization values safety in the work environment (Neal, Griffith, Hart, 2000). In the current study all three dimensions of VPV are proposed as moderators, but each may have a different moderation effect (i.e. magnitude) on the relationship between

workplace aggression and burnout. In this research, the dimensions of VPC were analyzed separately to gain insight on how they may differentially influence burnout.

I propose that teachers' perceptions of their school's VPC will moderate the link between workplace aggression and experienced burnout amongst teachers. As a psycho-social context of the work environment, violence prevention climate has previously been posited as a direct antecedent of actual workplace violence and psychological aggression (Kessler et al., 2008); and as a moderator of workplace stressors (such as workplace aggression) and physical/psychological strains (Probst, 2004; Yang, 2009). The extent to which employees perceive their organization to aid in the prevention of workplace violence has not only been found to be directly related to exposure to violence, but also indirectly to withdrawal behaviors in a sample of nurses (Kessler et al., 2008; Yang, 2009).

In line with the JD-R, I posit that the presence of a positive VPC is a job-related resource for preventing and eliminating aggression within schools, and thus, should mitigate the effect of aggression on teacher burnout. When teachers perceive that their school's administrator is doing everything in their power to ensure that organizational members are safe, and to ensure that policies and procedures support the goal of having a school environment free of aggression; teachers may perceive that encounters with workplace aggression are not a direct function of the organization itself, but rather random occurrences caused by individuals. Following this logic, the burnout that teachers may experience as a result of workplace aggression could feasibly be lessened in schools where positive VPC exists. In schools with positive VPC environments, teachers also probably feel more supported by supervisors when it comes to dealing with instances

of workplace aggression. If proper protocols are in place (policies and procedures), acknowledged, and enforced (practices and response) by administration, teachers can feel more confident in reporting and retaliating against acts of aggression. In sum, the perception that management is putting forth good effort to effectively manage school aggression may help prevent the loss of teacher energy resources due encountered workplace aggressions. I also hypothesize that strong perceptions of the pressure for unsafe practices dimension of VPC may serve to strengthen the relationship between workplace aggression and teacher burnout. Teachers who feel pressure to ignore violence prevention policies, such as disciplinary procedures, may feel as if they have no support from administration and fellow faculty in combating workplace aggressions. In this regard, that pressure may act as an additional stressor instead of a buffer.

Hypothesis 2a: Individual perceptions of the "policies and procedures" dimension of violence prevention climate will moderate the relationships between both physical and psychological workplace aggression (Type II, Type III, and ambient) and burnout syndrome; such that when perceptions of policies and procedures are stronger, the observed relationships between both physical and psychological workplace aggression and burnout syndrome will be weaker.

Hypothesis 2b: Individual perceptions of the "practices and response" dimension of violence prevention climate will moderate the relationships between both physical and psychological workplace aggression (Type II, Type III, and ambient) and burnout syndrome; such that when perceptions of practices and response are stronger, the observed relationships between both physical and psychological workplace aggression and burnout syndrome will be weaker.

Hypothesis 2c: Individual perceptions of the "pressure for unsafe practices" dimension of violence prevention climate will moderate the relationships between both physical and psychological workplace aggression (Type II, Type III, and ambient) and burnout syndrome; such that when perceptions of pressure for unsafe practices are stronger, the observed relationships between both physical and psychological workplace aggression and burnout syndrome will be stronger.

In addition to a job resource, VPC, the proposed research will investigate two personal resources as moderators of the workplace aggression-burnout relationship: *locus of control* (LOC) and *communal orientation*. These hypotheses are consistent with the position taken by Kahn and Byosserie (1992), who argued that the buffering effect (in the context of the JD-R) can occur between any pair of variables in the stress-strain sequence. Personal resources were argued to be properties of an individual that could reduce the tendency of organizational factors to "generate specific stressors, moderate responses that follow the appraisal process, or reduce the health-damaging consequences of such responses." (Kahn & Byosserie, 1992, p. 622). There has been research that has found support for this buffering affect of personal resources in the job demands-burnout relationship (Bakker et al., 2006; Xanthopoulou et al. 2007).

Locus of Control

Rotter (1966) posited *locus of control* as an individual attribute which describes behaviors as functions of one's reinforcements (rewards) and expectations. According to Rotter (1966), individuals who interpret life events as being caused by luck, chance, fate, "power of others," or believe that other forces, out of their control, are the main influence of their behaviors, are considered to have external LOC. If a person interprets life events

as being "contingent upon his[/her] own behavior or his[/her] own relatively permanent characteristics" (Rotter, 1966, p.1), and believes that the outcomes of their actions are results of their own abilities, that person is said to have an internal LOC.

As a personal resource, internal LOC may act as a buffer of the relationships between workplace aggression and burnout (e.g. Kahn & Byosserie, 1992). Those teachers who have higher internal loci of control most likely feel better equipped to deal with workplace aggression than those who have an external locus of control. This may be true because those with internally orientated loci of control are more likely to assess their personal contribution in upholding policies and procedures concerning safety, as well as believe that they have the power to help prevent and resolve issues dealing with school aggression. On the other hand, teachers who report having external LOC will more likely feel helpless in the face of workplace aggression. The following hypothesis is posited regarding the moderating effect of LOC in the relationship between workplace aggression and burnout:

> *Hypothesis 3*: *Internal Locus of control will moderate the relationship of both physical and psychological workplace aggression and burnout syndrome, such that at higher levels of Internal LOC, a weaker relationship between both physical and psychological workplace aggression and burnout will be observed.*

Communal Orientation

In addition, the communal orientation of teachers may also have a moderating effect on the relationship between the workplace aggression and burnout. Communal orientation is a construct that involves social obligation to help others. Varying degrees

of communal orientation have been found to be related to strains such as burnout (e.g. Van Yperen, 1996).

Communal orientation is an individual difference that gets at the willingness of people to give help to others who need it. Clark, Ouellette, Powell, and Milberg (1987) demonstrated that communal orientation leads to greater helping and greater responsiveness to the needs of others. However, those people who have high levels of communal orientation do not necessarily expect direct compensation for aiding others- they perform their duties because of their concern for others. Considering this, teachers with high levels of this trait, this concern may be able to better withstand workplace, and avoid burnout.

Communal orientation was hypothesized by Van Yperen and colleagues (Van Yperen, 1996; Van Yperen, Buunk & Schaufeli, 1992) to buffer the effects of burnout when faced with inequities in organizations. The research of Van Yperen and colleagues (1992), conducted on a sample of medical professionals, showed that when inequities were perceived by employees, communal orientation had a buffering effect on burnout. He also later replicated these findings in a sample of nurses (Van Yperen, 1996). More recently, Truchot (2009) found similar findings in a sample of French nurses. A perception of weak school VPC may be considered an inequity to teachers. They do their part, so administration should keep the schools safe, right? Similar to the aforementioned studies, I postulate that communal orientation will buffer the effect of workplace aggression on burnout syndrome in teachers- despite sentiments that poor VPC may be considered an inequity.

Van Yperen and colleagues (1992) suggested that a person's communal orientation should be considered when selecting candidates for nursing. It may also be useful for communal orientation to be used as a future predictor for performance when selecting teachers, especially for those in districts with salient school violence and/or weak VPC. There may be individuals who are better suited for dealing with the stressors of working in such an environment. Concerning communal orientation, the following hypothesis is proposed:

> *Hypothesis 4: Communal orientation will moderate the relationship of workplace aggression and burnout syndrome, such that at higher levels of communal orientation, a weaker relationship between both physical and psychological workplace aggression and burnout will be observed.*

CHAPTER 2

Method

Participants and Procedure

Data collection for this study began with contacting over 400 principles of K-12 public schools in the Midwestern United States to obtain consent for the advertisement of this research within their schools. Four administrators responded, giving consent to advertise to teachers in their school for voluntary participation in the study. Due to the low sample size gained through this initial data collection procedure (*n*= 29), I expanded the recruitment process to include internet advertising and reached out to personal and professional contacts working in education, via a snowballing method.

A cross-sectional self-report survey method was utilized, with both paper and pencil and online versions of the surveys. Teachers who learned about the study from advertisement provided directly in their schools typically opted to take the paper and pencil version (*n*= 36). Those who took the paper and pencil version retained their surveys until picked up by the principal investigator (PI), at their school upon completion. All participants who were recruited via on-line advertisement and/or contacted through e-mail from other teachers (snowballing technique), took the on-line version of the survey (*n*= 205). The on-line version was constructed and administered via the Qualtrics survey platform. All responses were anonymous, and kept confidential. No identifying information was collected that could be linked to participant survey data.

Initially, five random drawing incentives of $50 Amazon.com gift cards were offered to all participants who completed the survey. To enter the random drawing, respondents who took the paper and pencil version detached the last page of their survey,

on which they recorded a contact e-mail so they could be notified if they were selected in the random drawing. These pages were separated from the surveys, and collected separately to keep responses anonymous. An initial wave of participants who opted to take the on-line version were re-directed from the last page of the survey, a separate website with instructions on how to enter the $50 gift certificate drawing online by providing a contact e-mail. The drawing was conducted mid-way through data collection (due to very low response rate at that point, I decided to change the incentive rate/schedule- which I will discuss in more detail below). All respondent e-mail entries were entered into an Excel database, and assigned randomized numbers by a random number generator. Five of these numbers were then randomly selected for the $50 gift certificate recipients.

In an effort to increase response rates, after this drawing was completed, I changed the incentive to $10 Amazon.com gift cards for every completed survey. For paper and pencil respondents, when the surveys were collected, they were given a tangible $10 gift card. The on-line respondents followed the same procedure as aforementioned, but each contact e-mail received by the PI was granted a gift card after a brief quality control check (The Qualtrics site was checked to ensure that there was a survey entry with a feasible time-stamp match corresponding to the notification of participant contact e-mail entry. E-mails could still not be directly linked to an individual set of responses, and so remained anonymous- this was just a spot check to ensure that an individual had actually completed an on-line survey which roughly corresponded to the time an e-mail address was submitted to receive an award.) All electronic gift cards (both the $50 and $10 incentives) were sent directly from Amazon.com to the contact e-mails

provided by the respondents, so no further identifying information was necessary for prize distribution.

All participants were required to be full-time teachers, teaching a minimum of 30 hours per week. It was important that respondents had worked in the same school which would be used as the referent for survey items concerning VPC and workplace aggression. Teachers responded to the item, *Did you teach at the same school for the entire 2012-2013 school year?* Respondents who had not taught at their school since at least the beginning of the school year at the time of data collection (2012-2013 academic-year) were removed from the dataset (n= 5). Data received from teachers who work with mentally disabled or behaviorally challenged children were also omitted from this study (n= 2), in attempt to keep the baseline occurrence of aggressive student interactions free of confounds that may accompany this student sub-population. Aggressive behavior from students that have been identified as having behavioral problems may skew the data, and this research intended to focus on students who fall within the normal population regarding behavioral expectations/capabilities. These teachers were identified by their answer to demographic survey items regarding time worked in the same school, and the level of students they teach *(i.e., Do you work primarily as a special education teacher?*). Individual respondents with greater than 20% missing survey responses were also removed from the dataset (n= 34). A large number of respondents (n= 48) were also removed from the data gathered from the on-line survey platform due to suspicious response patterns accompanying repeated requests for monetary incentives. After investigating IP addresses, time spent taking surveys, and patterns of times the survey was taken, some participants were identified as falsely identifying themselves as teachers

and were removed from the dataset. Another indication of this was that none of these participants provided legitimate school districts for which they worked. Although participants were not required to answer this item, almost all participating teachers *did* answer this item. To prevent further false cases of this type, an additional stipulation was added which required respondents to provide an accurate school district faculty e-mail (recorded separately from their anonymous survey responses) in order to be eligible to receive a gift card.

The final sample consisted of 152 K-12 teachers from the U.S. The schools in the sample ranged from suburban/rural to urban, and so represented a wide scope of socio-economically diverse communities. The sample was 62.3% female. The mean age of participants was 37.09 years. Ethnicity of the sample was: 74.3% White, 22.4% African American, 1.3% Hispanic/Latino, and 2.1% Native Hawaiian/Pacific Islander/Asian/Other. The most frequent category reported for organizational tenure for teachers who participated was 3-5 years. The most frequently reported category for occupational tenure was 5-10 years. (Respondents chose both types of tenure from Likert scales, with each scale point describing a categorical bracket of time.)

Measures

Violence Prevention Climate. The Violence Prevention Climate Scale (Kessler et al., 2008; Appendix C) was used to measure teacher perceptions of their school's violence prevention climate. This scale consists of three dimensions, with six items for each dimension (policies and procedures- coefficient alpha .92; practices and responses- coefficient alpha .84; and pressure for unsafe practices- coefficient alpha .91). Certain items in this survey were slightly re-worded to make the school environment the referent

(terms used in the original survey referred to "organizational units.") Items were rated on a six point Likert-type scale; ranging from (1) *strongly disagree* to (6) *strongly agree*. A sample item is, "Administration in this school district requires each principal to help reduce violence in his/her school."

Workplace Aggression. A 12 item nursing aggression scale that was adapted by Yang (2010) from various sources in the literature (i.e., Barling, Rogers & Kelloway, 2001; Lanza et al., 2006; Neuman & Keashly, 2004; Rogers & Kelloway, 1997; Spector et a., 2007; Appendix C), was used to measure workplace physical and psychological workplace aggression. Three items measured psychological aggression, and nine measured physical aggression. Each [identical] item was asked in reference to other faculty members being the perpetrators (Type III), as well as student acting as the perpetrators of aggression towards teachers (Type II). An additional twelve [identical] items were added to the survey to assess the frequency with which teachers experienced ambient aggression (that of which they themselves were not the target, but occurred between students), making this scale a total of 36 items. Teachers were instructed to respond to items by indicating the frequency of exposure to each physical and psychological aggressive act during the school year, ranging from (1) *never* to (6) *daily*. A sample item from this measure is, "*Please indicate the frequency with which you have been: yelled, or shouted at."* Alpha coefficients for Type III aggression were: .98 (physical), and .90 (physical). Alpha coefficients for Type II aggression were: .96 (physical), and .86 (psychological). Alpha coefficients for ambient student aggression were: .91 (physical), and .86 (psychological).

Locus of Control. Duttweiler's Internal Control Index (Duttweiler, 1984; Appendix C) was used to measure locus of control. Coefficient alpha was .88. Participants were asked to fill in the blank on each item in order to indicate the typical response to the situations presented in items. The 28 items were rated on a 5-point Likert-type frequency scale ranging from (1) *rarely* to (5) *usually*.

Communal Orientation. A measure of communal orientation, consisting of 14 descriptive statements, developed by Clark et al. (1987; Appendix C), was used in the current study. Participants were instructed to rate how characteristic the item was of them, on a scale from (1) *extremely uncharacteristic* to (5) *extremely characteristic.* Items are constructed to assess whether the participant usually behaves in a communal fashion toward others, as well as whether the respondent expects others to reciprocate communal behavior toward them. Total scores for each participant on this scale were the average of scores from each item. Coefficient alpha was .84.

Burnout. The Oldenburg Burnout Inventory (OLBI) was used to measure burnout syndrome (see Demerouti et al. 2010). The OLBI measures exhaustion (psychological and physical) and work disengagement. It is composed of 16 items (8 disengagement items, 8 exhaustion items); all items were rated on a six point Likert-type scale: (1) *strongly agree* to (6) *strongly disagree* (see, Appendix C). Cronbach's alpha for the overall OLBI scale was .79, respectively. (Although there were no specific hypotheses posed regarding relationships to the individual dimensions of the OLBI, additional analyses were run to examine any possible differences in the nature of the observed relationships when positing either sub-dimension of the OLBI as the outcome

variable. Coefficient alphas for the disengagement and exhaustion dimensions were .74 and .68).

Control Variables. Occupational tenure was controlled for in the current study's analysis. Teachers who have stayed longer within their school, or in the profession in general, are probably less prone to experience burnout syndrome. This may be due to the ability to develop strategies over time, which helps to conserve the energy resources that may be more easily depleted by newer faculty. On the other hand, if a teacher has not taught at a school or been in the profession long enough to be exposed to the level of job demands that may cause burnout, the relationships between workplace aggression and VPC with burnout may not be captured. Salary level was also controlled for in the analysis. Teachers who are have been in the profession longer may have experienced more workplace aggression, and also be higher on the pay scale. There may also be a direct relationship between salary level and level of burnout- those who get paid more may be less prone to experience burnout because they feel they are being compensated well for their job, and the stress that accompanies it.

Statistical Analysis

To test hypotheses 1a and 1b, a hierarchical multiple regression was used for data analysis. Control variables, occupational tenure and income were entered in step one, followed by independent variables psychological and physical aggression in step two. The direction and magnitude of beta weights yielded by the hierarchical multiple regression, along with tests of significance, were used to support the proposed relationships. To test hypotheses 2a-c, 3, and 4, another set of hierarchical multiple regression models were run to analyze the data. Before these hierarchical multiple

regressions were run to assess the significance of moderation in the model, the independent variables (VPC and workplace aggression) and moderators (LOC, communal orientation, VPC) were mean centered (Aiken, West, Luhmann, Baraldi, Coxe, 2012). Control variables (occupational tenure and salary level) were entered in the first step of the models. The mean-centered independent and moderator variables being tested were entered in the second step of the model. In the third block of the model, mean-centered interaction terms (product terms of IVs and proposed moderators) were entered. A significant change in R^2 after the addition of the interaction terms served as an indication that there was moderation present (significant interaction between workplace aggression and moderators). A Microsoft Excel macro worksheet (Dawson, 2014) was utilized to yield a graph depicting the visual nature of any observed interactions using +/- 1 SD of the moderator (Aiken et al., 2012).

CHAPTER 3

Results

Descriptive Statistics. Scale means, standard deviations, and ranges of possible item responses for all measured variables are presented in Table 2. The means for each dimension of VPC fell above the midpoint of the scale. The Practices and Response dimension was significantly negatively skewed at alpha level .05 (-.68). The means for all three types of physical aggression (Type II, Type III, and ambient) fell well below the scale midpoint. Type II, Type III, and ambient physical aggression were all significantly positively skewed at the .05 alpha level (1.21, 1.63, and 1.01, respectively). Type III physical aggression was significantly platykurtic at alpha level .05 (1.30). The means of Type II and Type III psychological aggression fell slightly below the midpoint of the scale. The mean of ambient psychological aggression fell around the scale midpoint. Type II and Type III psychological aggression were both significantly positively skewed at the .05 alpha level (.65 and .97, respectively). The means of LOC and communal orientation fell around the scale midpoint. The distribution of both LOC and communal orientation were significantly platykurtic at the .05 alpha level (-1.21 and -1.51, respectively). The mean of overall burnout fell around the scale midpoint. Burnout was also significantly platykurtic at the .05 alpha level (2.43). Despite some departures from normality, I chose not to use any transformations, and kept all variables in their original scales, in an effort to aid interpretation of the results.

Inter-variable Correlations. Most bivariate zero-order correlations were in the expected directions, and significant where expected. Organizational tenure was only significantly correlated with four of the study variables (only including one type of

aggression- ambient psychological aggression); whereas, occupational tenure was significantly correlated with almost all other study variables. Considering this and the low sample size of the study, only occupational tenure was controlled for in order to conserve degrees of freedom in the hierarchical regression analyses. All three types of both physical and psychological aggression were significantly related to burnout at the .01 alpha level, with the exception of ambient psychological aggression. This is plausible considering the fact that this type of aggression is the probably farthest removed from a teacher's radar. It is also probably the hardest for teachers to perceive- it is more difficult to recognize whether or not students are engaging in psychological forms of aggression towards one another, than to recognize when physical aggression is occurring between them. All dimensions of VPC were significantly negatively correlated to burnout, as expected. LOC and communal orientation were also significantly negatively related to teach burnout, as expected. Zero-order bivariate correlations of all included study variables and control variables are presented in Table 3.

Hierarchical Regression Analyses. Hierarchical regression models were run to test Hypotheses 1b and 1b. After controlling for occupational tenure and income level, burnout was regressed on both psychological and physical aggression. This model was run three times, once for each type of aggression (Type II, Type III, and ambient), each including both physical and psychological forms of aggression. Results indicated that neither physical nor psychological Type II aggressions were significantly related to burnout (see Table 4a). For Type III aggression, only psychological aggression positively related to burnout ($\beta = .46$, $p < .01$; see Table 4b). Physical ambient aggression

was significantly related to burnout (β= .27, $p < .05$; see Table 4c); whereas psychological ambient aggression was not. Hypotheses 1a and 1b were both partially supported.

Hierarchical multiple regressions were run to test for the moderating effect of VPC on the relationships between both physical and psychological workplace aggression and burnout (Hypotheses 2a-c). All significant interactions were plotted at +/- 1 SD of the mean, and are depicted in Figures 2 – 3, for this set of hypotheses. The policies and procedures dimension of VPC was not found to be a significant moderator of the physical and psychological aggression-burnout relationships (for Type II, Type III, nor ambient). Hypothesis 2a was not supported (see Tables 5a, 5b, and 5c, respectively).

The practices and response dimension of VPC was a significant moderator of the relationships between both Type II and ambient psychological aggression and burnout (respectively, β= .20, $p < .05$, see Table 6a and Figure 2; β= .23, $p < .05$, see Table 6b and Figure 3). When teachers perceived their administration to weakly enforce the Practices and Response dimension of VPC, burnout decreased as Type II psychological aggression increased. When the perception was that practices and response were strongly enforced, burnout increased as Type II psychological aggression increased. The interaction was similar for ambient psychological aggression. When teachers perceived their administration to weakly enforce the Practices and Response dimension of VPC, burnout decreased as ambient psychological aggression increased. When the perception was that practices and response were strongly enforced, burnout increased as ambient psychological aggression increased. Neither physical nor psychological Type III aggression was moderated by VPC practices and response (see Table 6c). Therefore, Hypothesis 2b was partially supported. Pressure for unsafe practices was not a

significant moderator of psychological or physical aggression (Type II, Type III, nor ambient). Hypothesis 2c was not supported (see Tables 7a-c, respectively).

To test Hypotheses 3 and 4, hierarchical multiple regressions were again utilized. Income and occupational tenure were entered in the first step, in the same manner described above. LOC was did not significantly moderate the relationships between psychological nor physical aggression (Type II, Type III, and ambient) and burnout. Hypothesis 3 was not supported (see Tables 8a-c, respectively). Communal orientation also did not emerge as a significant moderator for the hypothesized relationships. Hypothesis 4 was not supported (see Tables 9a-c, respectively).

Supplemental Analyses. To further investigate the nature of the hypothesized relationships, an additional set of hierarchical regression analyses was run with each sub-dimension of burnout (disengagement and exhaustion) as the dependent variable.[1] The thinking behind this was that, upon examination the narrower facets of burnout, significant relationships could be revealed that were not observed when overall burnout was the dependent variable. This rationale is in line with Information Bandwidth theory (Cronbach & Gleser, 1957) which describes the nature of predictors determining relationships with outcomes of interest. Narrower bandwidth predictors should have stronger relationships with expected outcomes than those of broader bandwidth (Cronbach & Gleser, 1957). The same can be said of examining narrower outcomes of interest.

[1] As originally proposed, burnout was examined as a single construct including both sub-dimensions. The addition of these analyses was a supplement to the analyses presented. The dimensions of disengagement and exhaustion were correlated (r = .46), but not so close to 1.0 that they would be considered as non-distinct.

Tables for all non-significant results of supplemental analyses were omitted. When disengagement was positioned as the dependent variable, both physical *and* psychological ambient aggression were significant predictors (β= .36, $p< .05$; β= -.23, $p< .05$, respectively; see Table 10a). When overall burnout was examined, psychological ambient aggression was not found to be a significant predictor. However, the observed relationship between ambient psychological aggression and disengagement is in the opposite direction than would have been expected. Type II physical aggression was significantly related to disengagement (β= .27, $p< .01$; see Table 10b), psychological Type II aggression was not. Neither physical nor psychological Type III aggressions were significant predictors of disengagement. Neither type of ambient, nor Type II aggressions were significantly related to the exhaustion dimension of burnout; but both physical and psychological forms of Type III aggression were significantly related to exhaustion (β= -.51, $p< .01$; β= .55, $p< .01$, respectively; see Table 10c), albeit the physical aggression-exhaustion relationship was in the opposite direction than would have been expected.

Supplemental analyses were also run for all moderation analyses, and yielded a few significant interactions that were not observed in the initial analyses. Pressure for unsafe practices was found to significantly moderate the relationships between Type II psychological aggression (β= .25, $p < .05$; see Table 11a and Figure 4), Type III psychological aggression (β= .32, $p < .05$; see Table 11b and Figure 5), and the disengagement dimension of burnout; whereas this dimension of VPC did not significantly moderate those relationships when overall burnout was posited as the dependent variable in the model.

When running a model with all three dimensions of VPC together in the same step for moderation, Hypothesis 2c (moderation by VPC pressure for unsafe practices dimension) for Type II psychological aggression was supported when the disengagement dimension of burnout was the dependent variable (β= .23, $p < .05$; see Table 11c and Figure 6). When the exhaustion dimension of burnout was the dependent variable in the supplemental model which included all three dimensions of VPC as moderators in the same step, pressure for unsafe practices became a significant moderator of the relationship between ambient psychological aggression and this dimension of burnout (β= -.29, $p < .05$; see Table 11d and Figure 7).

Considering Hypothesis 3- which was not supported for the proposed relationships between any of the three types of psychological and physical aggression and overall burnout; LOC became a significant moderator of the Type II physical aggression-burnout relationship when the exhaustion dimension of burnout was the dependent variable (β= .63, $p < .01$; see Table 12a and Figure 8). This significant LOC moderation was also observed for the relationship between ambient physical aggression and the exhaustion dimension of burnout (β= .28, $p < .05$; see Table 12b and Figure 9).

Two significant moderations were also observed in supplemental analyses for communal orientation (Hypothesis 4), when the disengagement dimension of burnout was tested as the dependent variable in the model (see Table 13). The relationships between both physical and psychological ambient aggression and disengagement were significantly moderated by communal orientation (β= -.23, $p < .05$; see Figure 10; β= .25, $p < .05$; see Figure 11, respectively).

CHAPTER 4

Discussion

Using the JD-R as a theoretical framework (Demerouti et al., 2001), this study investigated the relationship of Type II, Type III and ambient physical and psychological workplace aggression (conceptualized as job demands) with teacher burnout. Following the JD-R framework (Demerouti et al., 2001), the moderating effect of an organizational resource, VPC, was also examined. In line with additional research that has shown support for the moderating effects of personal resources in the job demands-burnout relationship (Bakker et al., 2006; Xanthopoulou et al., 2007), LOC and communal orientation were also investigated as moderators of workplace aggression and burnout. It was hypothesized that both physical and psychological forms of workplace aggression (for Type II, Type III, and ambient aggression) would be positively related to burnout experienced by teachers; and that more positive perceptions of VPC dimensions, more internalized LOC, and being more communally oriented, would mitigate the negative effects of workplace aggression on burnout.

Hypotheses 1a and 1b were both partially supported; Type III psychological aggression and ambient physical aggression were both significantly related to burnout (when measured as a single factor, including both the disengagement and exhaustion dimensions). Hypothesis 2b was also partially supported in that the relationships between both Type II and ambient psychological aggression with overall burnout were moderated by the practices and response dimension of VPC. Hypotheses 2a and 2c were not supported; neither policies and procedures nor pressure for unsafe practices significantly moderated the relationships between any types of physical or psychological aggression

and burnout. Neither LOC or communal orientation were found to moderate the hypothesized relationships between the different forms of workplace aggression and burnout- Hypotheses 3 and 4 were also not supported. Supplemental analyses, investigating all hypothesized relationships with the individual dimensions of burnout- exhaustion and disengagement, did reveal some additional significant relationships. A detailed discussion of these findings and their implications, limitations of the current study, and suggestions for future research follows below.

Hypothesis 1a. In initial analyses, ambient physical aggression was the only type of *physical* aggression that was significantly related to overall burnout. It is probably most likely that this is the most common type of physical aggression that teachers may deal with during a school day, and the results of the current study support that notion (reported mean levels of this type of physical aggression were higher than both Type II and Type III, see Table 2). The probability that another teacher or a student would directly engage in a physical altercation with a teacher is a lot lower than the probability of students getting into fights with each other. The consequences for a teacher who physically assaults another teacher would, at minimum, be a suspension or termination. In the worst case scenario, a teacher may even lose his/her teaching license because of engaging in Type III physical aggression at work. Students who choose to engage in physical confrontations with teachers generally fall into a "no tolerance" category of disciplinary sanction, and thus will likely be permanently expelled from their school; in comparison to the typically lighter sanction of being temporarily suspended for fighting with other students. Though Type II physical aggression yielded a slightly higher bivariate zero-order correlation with overall burnout (r = .25, p< .01), the lower frequency of this type

of incident in comparison to witnessing ambient physical aggression is a probable statistical explanation for ambient aggression being a stronger predictor. As a theoretical rationale for why this type of physical aggression was related to burnout and the others were not- teachers may view having to deal with this type of behavior between students as extra-role. It is expected that students will know how to conduct themselves accordingly in a school environment. Physical aggression that occurs between students is a distraction to those trying to stay focused; so it is a disturbance to not only the teacher, but other students as well. A teacher has to exert energies not only towards the students involved in the act of physical aggression, but also towards regaining the attention of the rest of the rest of the uninvolved students.

In the supplemental analysis, Type II physical aggression (students engaging in physical aggression towards teachers) was significantly related to the disengagement dimension of burnout. Perhaps on the rare occasion that students do become physically aggressive towards teachers, teachers' reactions are to become disengaged in work rather than becoming exhausted. The act of withdrawing may make teachers feel as if they are lessening the chance of encountering physical altercations with students, by being physically being less present or mentally "tuning out." This process was conceptualized as a self-preserving coping strategy by Demerouti and colleagues (2001). Physical Type III aggression was also found to be significantly related to the exhaustion dimension of burnout in supplemental analyses. This relationship was in the negative direction, opposite than would have been expected. Type III physical aggression was not significantly correlated (bivariate, zero-order) with the exhaustion dimension of burnout (see Table 2) and there was no indication of issues with multicollinearity (tolerance for

Type II physical aggression was .88, well above the .10 cutoff), so statistical artifact doesn't seem to be a factor here. There is no clear theoretical explanation as to why this surfaced. It is unlikely that teachers would experience increased exhaustion as levels of aggression decrease. Further analyses of this relationship would be needed to uncover what is occurring.

Hypothesis 1b. Type III psychological aggression was significantly related to overall burnout in the initial testing of Hypothesis 1b. Although, Type III psychological aggression was reported to occur less frequently than Type II or ambient (see Table 2), it yielded the strongest bivariate zero-order correlation with over all burnout (r = .28, p< .01, see Table 3) in comparison to Type II and ambient. Whereas students face disciplinary consequences for verbally or subversively psychologically antagonizing a teacher; Type III psychological aggression, occurring between faculty, is also probably less likely to be policed. So although it is reported to be experienced less, it may actually cause more strain. Student psychological aggression directed towards teachers and occurring amongst themselves, may fly under the radar as common rudeness that is more readily accepted as "part of the job" by teachers- though they encounter this type of aggression most often (M = 2.19; M = 3.33, respectively). In supplemental analyses for Hypothesis 1b, both Type III and ambient psychological aggression were significantly related to the disengagement dimension of burnout. As Type III psychological aggression was related to overall burnout in the initial analysis, this relationship uncovers that the link to disengagement is what is driving the relationship with overall burnout. Ambient psychological aggression was also significantly related to disengagement (β = -.23, p< .05, see Table 5a). This negative relationship was in the opposite direction than

would have been expected, and it is unlikely that decreases in student psychological aggression would contribute to increases in teacher disengagement. Ambient psychological aggression was not significantly correlated with disengagement, and upon inspection of the tolerance value (.94), there does not appear to be any evidence of multicollinearity issues. Further analyses would need to be conducted to uncover why this relationship surfaced.

Hypothesis 2a. Hypothesis 2a was not supported in the initial hypothesis- policies and procedures did not moderate the relationships between any types of physical or psychological aggression and overall burnout. Supplemental analyses showed that this dimension of VPC also did not moderate any of the aggression-burnout relationships when examining the individual dimensions of burnout, disengagement and exhaustion. The policies and procedures dimension of VPC assesses employees' awareness of formal organizational policies concerning the prevention of workplace aggression and violence (Kessler et al, 2008). The findings of the current study may be an indication that simply being *aware* of VPC policies and procedures is not enough to mitigate the negative effects of workplace aggression on burnout. This factor of VPC focuses on the role of the employee having job knowledge about what to do in a violent/aggressive situation. This may have less of an effect as compared to what administration actually *does* (practices and response, or adding pressure to perform unsafely) to handle acts of aggression when they have actually occurred.

Hypothesis 2b. The practices and response dimension of VPC was a significant moderator of the relationships between both Type II and ambient psychological aggression and overall burnout. The nature of both of these interactions reflected that

when teachers perceived the administration to weakly enforce VPC practices and response, burnout decreased as psychological aggression increased. When teachers perceived this dimension of VPC to be strongly enforced, burnout increased as psychological aggression increased. Although these interactions were significant, the direction of the negative slope of weakly enforced practices and response is most likely a statistical artifact. There is no strong theoretical explanation for burnout decreasing as aggression increases; by all accounts, and in line with the JD-R (Demerouti et al., 2001), it is expected that as a job demand increases the level of burnout will increase. One possible explanation is that teachers who are in school environments that are normally more aggressive and also characterized by administration that doesn't have a great track record of handling aggression incidents, have become immunized to psychological aggression from students and between students. While those who work in schools where levels of aggression are typically low, may become more easily burned out when they feel that administration doesn't properly and promptly intervene in the rarer chance that it does occur.

This explanation does not hold for the findings concerning the relationship between psychological aggression and burnout, when perceptions of VPC practices and response enforcement are strong. In this situation in the current sample, the expected positive slope was observed. Following the JD-R framework (Demerouti et al., 2001), burnout is intensified as job demands become more taxing. When teachers are in a school environment where they are used to being able to depend on administration for intervention, increased occurrences of psychological aggression from students and between students- despite good practice and response procedures- may be viewed as even

more taxing. The tendency for burnout to increase may stem from a feeling of helplessness, in that your administrators are doing what they are supposed to do to deal with these incidents, yet they are still occurring frequently.

The practices and response dimension of VPC captures employee perceptions of management's enforcement of prevention policies, and their responses to incidents of workplace aggression. From the perspective of mean differences, at low levels of psychological aggression teachers who perceived their school to weakly enforce the practices and response dimension of VPC reported higher levels of burnout compared to those who perceived strong enforcement of VPC practices and response. At high levels of psychological aggression, providing strong practices and responses regarding VPC enforcement weakens the link between aggression and burnout. These findings point to the power of VPC practices and response perceptions held by teachers to help them deal with psychological aggression that takes place involving students, whether it be students directly targeting them, or being psychologically aggressive amongst themselves. This finding supports the notion mentioned above that what the administration actually *does* holds some weight in buffering burnout.

This moderation may not have been supported with Type III psychological aggression because the enforcement for teacher-to-teacher instances of psychological aggression may be harder to capture and police, and may also be less explicitly addressed in HR policy. When examining physical workplace aggression of all types (Type II, Type III, and ambient), no significant moderating effects by the practices and response dimension of VPC was observed. It could be the case that, when physical aggression occurs, the resulting strain is just too much to be effectively buffered by perceptions of

practices and response. Enforcement of *prevention* policies may not always actually *prevent* incidents of aggression. So when they do occur, knowing that your boss enforced the policy that was supposed to prevent the event in the first place may not do very much in the way of buffering the negative effect it has on burnout. The response part of this dimension may have more of a mitigating effect, but in instances of physical aggression which has already occurred, it may be viewed as too little, too late. No additional relationships with disengagement and exhaustion surfaced in supplemental analyses for Hypothesis 2b.

Hypothesis 2c. When investigating the possible moderating effects of perceptions of pressure for unsafe practices on relationships between workplace aggression and overall burnout, there were no significant findings observed. However, supplemental analyses revealed that this VPC dimension was a significant moderator when specifically examining the disengagement or exhaustion dimensions of burnout. Pressure for unsafe practices was found to significantly moderate the relationships between Type II psychological aggression, Type III psychological aggression, and the disengagement dimension of burnout. When teachers perceived that there was low pressure for unsafe practices by their administration, disengagement decreased as Type II and Type III psychological aggression increases. When the perceptions were that there was high pressure for unsafe practices by their administration, disengagement increased as Type II and Type III psychological aggression increased. Again, as with the aforementioned explanation for the results of tests for Hypothesis 2b, the negative slope of the aggression-burnout relationship when pressure for unsafe practices was low is most likely a statistical artifact. This nature of this relationship does not follow the JD-R theory

(Demerouti et al., 2001). The positive slope between aggression and burnout in instances where pressure is perceived as high does support the propositions of the JD-R.[2]

When interpreting the observed relationships in terms of mean differences, at low levels of psychological aggression when teachers perceived that there were high levels of pressure for unsafe practices- they actually reported lower levels of disengagement compared to those who perceived pressure for unsafe practices to be low. This observation may be an indication that teachers experience less burnout strain, specifically disengagement, when they feel as if they have the freedom to do what they need to do to circumvent acts of aggression which directly involve them- even if it means deviating from VPC policies and outlined procedures.

More so than the perception of administration exerting extra pressure on teachers to violate VPC protocols, teachers responding to items in this dimension may have interpreted that the items reflected the support of administration in doing whatever is necessary when acts of aggression occurred. I asked my mother, who is a retired public school teacher, her interpretation of the item "In my school in order to get the work done, one must ignore some violence prevention policies." Her feedback was that this was often very true of dealing with aggressive acts which occur in real time during a school day; and that principles who understood this were seen as more understanding of the notion that you don't always have to time to fill out and file extensive incident reports and referrals. Perceptions that strict compliance with VPC policies must be adhered to when aggressive incidents occur may be seen as an overwhelming job demand which causes *more* stress, resulting disengagement from work.

[2] An alternative model in which all three dimension of VPC were run in one step was also tested. This model yielded the same results regarding Type II psychological aggression and disengagement (see Figure 6).

Pressure for unsafe practices also became a significant moderator of the relationship between ambient psychological aggression and the exhaustion dimension of burnout, in the supplemental model which included all three dimensions of VPC as moderators in the same step; which in this case could be an indication of suppression effects. The nature of this interaction was slightly different from the aforementioned. The slope between aggression and exhaustion was negative when pressure for unsafe practices was *high*, and positive when pressure was *low*.

In this instance, considering mean differences, teachers who perceived more pressure for unsafe practices only reported lower levels of exhaustion when psychological ambient aggression was high. When psychological ambient aggression was low, the inverse relationship was observed (teachers who perceived *less* pressure for unsafe practices reported lower levels of exhaustion). Perhaps the difference in the teacher being the direct target (Type I and Type II) versus witnessing the psychological aggressions occur between students (ambient) has something to do with this. When the issues of aggression directly involve the teachers, they may want the freedom to act on the spot without paying attention to the proper protocol on *how* to act; but that same "freedom" in the context of addressing psychological aggressions that do not directly involve them contributes to exhaustion. They probably desire the support of following protocol when reporting aggression between students in order to be fair. Plus, since the incident didn't directly involve them, they may feel as if they have more time to follow proper VPC procedures and view pressure to do otherwise as taxing, or exhausting.

Hypothesis 3. In the initial analysis, LOC was not found to significantly moderate the relationship between any of the three types of psychological or physical aggression

and overall burnout. Supplemental analyses showed that LOC was a significant moderator of the Type II physical aggression-burnout relationship when the exhaustion dimension of burnout was the dependent variable. When teachers reported having more externalized LOC, exhaustion decreased as Type II physical aggression increased. When LOC is more internalized, exhaustion increased as Type II physical aggression increased. A significant LOC moderation also was observed for the relationship between ambient physical aggression and exhaustion. When teachers reported having more externalized LOC, exhaustion decreased as ambient physical aggression increased. When LOC is more internalized, exhaustion increased as ambient physical aggression increased. There doesn't seem to be a plausible theoretical explanation for the negative slope observed between aggression and exhaustion when LOC is internalized (it seems likely that in this case, rising levels of aggression would exacerbate levels of burnout). However, for those with internalized LOC, perhaps the fact that these individuals *do* believe that they have more control over external events causes them to become *more* exhausted in situations of frequent aggression acts. They may feel as if they should be able to reduce the occurrence of physical and psychological aggression behaviors aimed at them, *especially* when students are the perpetrators. So as the frequency of aggression increases, they may feel more frustration in the face of not being able to curtail these incidents.

In terms of mean differences, teachers with higher levels of LOC (more internalized LOC) showed much lower levels of exhaustion as compared to those with lower LOC (more externalized LOC). In line with the transactional process model of coping (Lazarus & Folkman, 1984), teachers with internal LOC may appraise these stressors as challenges instead of threats. This positive coping mechanism has been related enhanced

role-based performance (Wallace et al., 2009). Teachers who believe that they hold some power to affect outcomes most likely avoid being exhausted by run-ins with student physical aggression (be it between students, or targeted towards them), because they actively seek actions of recourse to deal with these matters. Those who have more externalized LOC probably feel as though physical aggression, especially that which involves students, is just out of their hands and that they have no control over it. These individual LOC perceptions could be linked to exhaustion because those with external LOC perceive a substantial lack of organizational resources which they deem necessary to buffer the negative effects of physical aggression on exhaustion. At high levels of Type II and ambient physical aggression, differences in levels of LOC do not differentially relate to experienced exhaustion. This is plausible; considering the fact that physical workplace aggression can be intense, even highly internalized LOC may be ineffective at buffering its contribution to experienced exhaustion.

Hypothesis 4. The moderating effect of communal orientation in the workplace aggression-overall burnout link was not supported in the initial analysis. However, in supplemental analyses, the relationships between both physical and psychological ambient aggression and disengagement were significantly moderated by communal orientation. When teachers reported low levels of communal orientation, disengagement increased as ambient physical aggression increased. When communal orientation was high, disengagement decreased as ambient physical aggression increased. The relationships were the inverse for psychological ambient aggression. When communal orientation was low, the aggression-disengagement slope was negative; it was positive at high levels of communal orientation.

At high levels of physical ambient aggression, higher levels of communal mitigated the negative effect of aggression on disengagement. Communal orientation seems to be a personal resource that does have a buffering effect. Teachers who feel a sense of obligation to educating students are probably less inclined to disengage from their work in the face of students fighting with each other. Witnessing high levels of between student physical aggression may even increase their sense of communal duty to the population they serve. If students are engaging in physical aggressions with each other, it is getting in the way of learning; so those teachers with high levels of communal orientation may feel even *more* obligated to help by further engaging the situation. It could be that the more engaged these individuals are, the *less* burnout they feel- hence the negative slope observed in the supplemental moderation analyses.

I cannot offer any theoretical reasoning as to why the nature of this interaction for psychological ambient aggression was different from that of physical ambient aggression with disengagement. I would think that similar patterns would emerge for the power of communal orientation to weaken the positive relationship between both forms of ambient aggression and disengagement, at high levels of aggression. Again, due to the sample characteristics, the observed relationship may just be a statistical artifact. Further analysis is needed to explain the differences observed in these interactions.

There is also research that shows a negative link between similar constructs, like altruism, and emotional exhaustion (Dreary, Watson, & Hogston, 2003; Piedmont, 1993). An alternative to the buffering effects of communal orientation, as proposed in the current study, could be that communal orientation may actually increase factors associated with burnout. Pines (1982), explains that the level of idealism found in

professionals is associated with experienced emotional exhaustion, when the work environment is disappointing in that it doesn't fulfill idealistic expectations. Teachers are probably similar to social work and nursing professionals (which were the focal populations of the aforementioned studies), in that they hold idealistic hopes of positively affecting change with their students. Being faced with a less than ideal work environment, such as one with high levels of workplace aggression, may have the effect of *increasing* burnout. Future studies should investigate the possible negative moderating effects of communal orientation in the workplace aggression-burnout link.

General Discussion

The purpose of public schools in our nation is to impart knowledge and provide a supportive social environment for the students that populate them. If schools are perceived as unsafe environments to the school faculty members hired to achieve those goals, those perceptions may block a clear path to goal attainment. As burnout has been shown to relate to turnover (Leiter & Maslach, 2009), it is important to investigate antecedents and plausible moderators of teacher burnout. Better understanding these relationships will contribute to strategic efforts of school organizations to halt teachers from exiting the profession. Research findings in this area could serve as the basis for interventions to slow the onset of burnout, or select teachers that may be better equipped to deal with aggression-related job demands, hopefully circumventing subsequent turnover. Considering the associated annual organizational costs across the U.S. being estimated in the billions (Carroll, 2007), this represents a truly beneficial line of research for school organizations and the staff they employ. The retention of quality school faculty is essential, especially in under-achieving and/or high-risk districts that need it the

most (Vanderslice, 2010). Teacher turnover rates are 50% higher in low-poverty schools than those of higher SES populations (Ingersoll, 2001). The failure of these schools to close the gap in teaching quality results in the evidenced failure to close the widening achievement gap across these student populations (NCTAF, 2007b).

Encounters with workplace aggression are related to burnout syndrome. In line with the JD-R (Demerouti et al., 2001), this study adds support for the ability of organizational resources, like positive climates, to act as buffers against the negative effects of job demands on burnout. The findings of the current study also provide additional support for previous findings that identified the ability of personal resources to act as buffers between job demands and burnout (Bakker et al., 2006; Xanthopoulou et al., 2007). There are a multitude of factors that have been found to be related to teacher burnout, and the current research identifies a specific organizational climate factor that can be essential in helping reduce teacher burnout resulting from being the target of and/or the witness to instances of physical and psychological workplace aggression. With this in mind, schools need to consider the importance of creating and enforcing positive climates for effective psychological and physical aggression prevention and response. Based on the findings in this study, I would advise schools to target the enforcement of practices and response. The VPC dimension policies and procedures captures the extent to which teachers know the content of safety protocols in their schools. This was not a significant moderator of the aggression-burnout relationships, probably because it is not proximal enough to actual occurrences of aggression, and has less power to mitigate the resulting strain- aggression occurs whether you are familiar with policy or not! It is what administration actually *practices*, and how they *respond*, when these incidents occur, which has more power to

mitigate burnout. The findings regarding the role of pressure for unsafe practices were interesting. By no means, would I advise any school administration to increase pressure for unsafe practices- but the results of the current study may be an indication that organizations should examine the decision latitude they allow their employees when dealing with workplace aggression. In line with the Job Demands Control model (Krasek, 1979), increasing this latitude may decrease the strain resulting from job demands.

Most of the significant interactions (8 out of 11) in this study, indicated that the organizational and personal resources tested for moderation (VPC dimensions, LOC, and communal orientation) were only effective at mitigating experienced burnout in teachers at low levels of psychological or physical aggression. In most instances when the levels of psychological and physical aggression experienced by teachers were high, the buffering effects of these variables became negligible. It is likely that the stress induced in work environments which are characterized by high levels of aggression may call for a more extensive role of organizational or individual resources to be able to mitigate the negative effects of workplace aggression on burnout. But providing support for the role played by contextual organizational factors, such as VPC, in buffering negative outcomes for teachers working in aggressive environments is a good place to start. Identifying the parameters of these relationships is also crucial to developing and refining related theory.

Uncovering the types of individual differences which act as personal resources to help buffer the workplace aggression-burnout relationships is also helpful. During the selection process, organizations may want to consider the personality profile that an employee comes equipped with. Possession of certain traits, like internalized LOC or

high levels of communal orientation, may serve a teacher well. In line with the positive psychology thrust of the health model of occupational well-being, research in occupational health psychology has highlighted the recent trend of examining positive traits such as vigor and hardiness in the investigation of factors that contribute to well-being in the workplace (Macik-Frey, Campbell-Quick, & Nelson, 2007). The current study adds to that stream of literature with the findings regarding the moderating effects of LOC and communal orientation. Of course personality traits are one small piece of the pie of predictors of teacher performance that school administration may consider, but it would be wise for administrative hiring teams to measure these types of traits, with the goal of increasing person-organization fit, when placing teachers in schools within their district; or determining if they would be a good fit for any of the district's schools. Although there is, expectedly, a period of adjustment in which new teachers will likely sink or swim (Ingersoll, 2012; Goddard, O'Brien, & Goddard, 2006) proper attention to individual differences during the selection process may lessen the potential for teachers to experience burnout in the earliest stages of their careers.

Limitations

The current study was cross-sectional in nature, which prevents the determination of directionality and causality between variables. However, the results did yield preliminary empirical support for the existence of the hypothesized relationships, and thus represents a positive first step in identifying antecedents and moderators of teacher burnout. Future studies would benefit from capturing the hypothesized relationships over multiple time points, so as to show causality and the manifestation of and/or changes in relationships over time.

Another limitation of this study was the low sample size achieved (N= 152), which caused the statistical analyses performed in the current study to be underpowered. Based on a power calculation (http://www.raosoft.com/samplesize.html), the recommended sample size for a 5% margin of error and 95% confidence interval was a minimum of 377 participants. This population was difficult to obtain data from. The nature of the survey, which included sensitive information (requiring participants to offer information, which may have been negative, about their immediate supervisor), may have caused many participants to be hesitant in participating. The failure of management to provide a positive VPC climate and/or the presence of violence within the workplace is the type of sensitive topic that could evoke hesitancy in responding. Many fear being sanctioned by school administration for honestly reporting conditions within the schools where they work. The requirement that was instated later during data collection, asking participants to divulge their faculty e-mail address for incentive distribution, likely exacerbated fears of anonymity violation (although it was made explicitly clear that the e-mail could, in no way, be linked to their survey responses). I also gained some qualitative information from teachers who did participate, regarding the hectic nature of their teaching and planning schedules- which made it difficult for them to dedicate time to participation in the this study. The length of the survey was also mentioned by participating teachers, who complained that it was too long- and would've preferred a shorter version. When a research survey is presented which is voluntary, many feel as if they just can't dedicate the time outside of work to complete it. Teachers are extremely busy, and find it hard enough to keep up with even just their preliminary schedules. This is evidenced in other studies published in top educational and psychology journals,

examining burnout in teachers- some with sample sizes as low as 64 participants (e.g. Moya-Albiol, Serrano & Salvador, 2010a; Moya-Albiol, Serrano & Salvador, 2010b). There have also been studies investigating workplace incivility (e.g. Zhou, 2014; N= 75) and violence prevention climate (e.g. Golubovich & Chang, 2014; N=152) which had comparable, or smaller sample sizes than the current study. Obtaining a lower sample size than desired, does not necessarily prevent successful research inquiry in this domain. Additionally, in the current study, the deletion of nearly 100 participants (due to false identification as current teachers) substantially diminished the initial sample size. The analyses, even despite being low powered due to the small sample, did yield some support for the relationships hypothesized.

In the current study, data was not collected regarding the grade level taught by each respondent. There could very well be differences between different grade levels and the amount of workplace aggression experienced by teachers- especially Type II and ambient aggression. I did gather some qualitative insight from teachers regarding perceived differences in aggression due to grade level, prior to collecting data. The responses I got were widely varied in that teachers from all grade levels reported the school district, and even class composition, as playing a larger role in this matter. Even kindergarten teachers reported having dealt with Type II and ambient aggression. Younger children may not yet have the self-control to abstain from aggressive behavior- even when in the school environment. A 5 or 6 year old is probably more likely to throw a tantrum than a middle school or high school aged adolescent. Yet, older children may have more social issues in a school setting which could lead them to act more

aggressively. Nonetheless, if analyses could have been conducted by teacher grade level in the current study, it could have provided additional insights.

Scatter plotting and frequency analyses revealed that responses regarding frequency of aggression within schools were highly concentrated on the low end of the scale. For Type II aggression, when looking at both physical and psychological aggression, no teachers reported experiencing any of the aggressive behaviors from students weekly or daily. Only 13 teachers (of 149 who responded to these items) reported experiencing any of the listed physical or psychological aggressive behaviors on a monthly basis. As for Type III physical and psychological aggression, only 8 teachers of 149 reported experiencing the behaviors from other faculty on a weekly basis. Eleven of 149 respondents reported encountering these behaviors on a monthly basis. Ambient aggression was similar in that 1 teacher reported experiencing aggressive behaviors on a weekly basis; and only 18 reported having encountered these types of behaviors occurring between students on a monthly basis. Overall, there were no reports of dealing with physical nor psychological aggression on a daily basis; and the majority of teachers reported the frequency of these behaviors to be "a few time," 'once or twice," or "never." Log 10 transformations were conducted on all aggression variables within the current sample to try to correct for this positive skew; however, the re-running of analyses with the transformed variables yielded the same results. The positive skew of the sample, in terms of frequency of workplace aggression reported, most likely affected the ability to observe many of the initially proposed hypotheses- and making it especially difficult to observe significant interactions. Future studies that are able to obtain a larger sample of

teachers may be able to capture more variance in reported workplace aggression, gain increased statistical power, and may therefore observe more significant effects.

Future Directions

This study addressed a void in the budding VPC literature to provide empirical evidence for its moderating effect on the workplace aggression-burnout relationship. The support for the moderating effect of LOC and communal orientation in the workplace aggression-burnout link is also novel in the occupational health psychology literature. The current study opens the door to a line of research which can investigate more strategic climate constructs, such as violence prevention, and positive personal resources of teachers to help illuminate contributors to and/or buffers against teacher burnout. The most valued contribution of this research rests on the notion that it will serve as another calculated step towards the much needed improvements within our schools. The more factors that we identify as key to decreasing the chance of experienced burnout increasing, and in doing so, increasing the chance of school faculty retention- the better chance we have at creating school environments in which the students, faculty, and surrounding community can flourish.

Future research aimed at investigating the hypothesized relationships presented in the current study may want to consider some of the following suggestions regarding the key variables. The measure used in the current study to capture aggression was in the form of a list of specific behaviors, for which respondents indicated the frequency with which they encountered (i.e. *"been spat upon"*). Future studies investigating teacher populations may benefit from using measures of physical aggression that are less specific, or more typical of what teachers may experience (this measure was created

considering typical aggressive acts that may be experienced by nurses- mostly from patient perpetrators). Seeing that there was such a low base rate reported by teachers for the frequency of these specific behaviors, this could be an indication that the behaviors listed in the measure used were atypical of the type of physical aggressions usually encountered by teachers. Also, the consideration of using a more expansive measure of manifestations of psychological aggressions, which captures a wider breadth of incivilities than the three behavioral items utilized in this study, may more aptly capture the range of psychological aggressions commonly experienced by teachers. A wider range of behaviorally based items describing psychological aggression may reveal an even stronger link between this type of aggression and burnout. In short, the psychological sub-scale used in this study may have been deficient.

Concerning the use of the VPC measure in future research within the teachers' population, clarification of the organizational referent responsible for the institution of VPC could be helpful. The referent responsible for initiating and upholding VPC may vary from district to district, or even school to school. While administering the survey, I encountered a few instances where the question was raised as to which "supervisor" the survey items were referencing (i.e. district administration, principal, vice principal, special school agents hired to deal with discipline such as Dean of Students, etc.). Results will likely vary between teachers if the organizational referent is not explicitly stated. When questions are asked in referent to a general "supervisor," there may be variation in teacher interpretations regarding *who*, exactly, is directly responsible for the upkeep of their school's VPC. The choice of referent needs to be clearly explained, and may require front end investigation by the researcher to identify the correct referent for

each district, based on job duties of administrators (which many vary from district to district).

The consideration of the use of an alternate measure of burnout in future studies is also warranted. There does exist a validated measure of burnout (based on the Maslach Burnout Inventory) constructed specifically for those in the teaching population (see Mantilla & Diaz, 2012). This measure of burnout, in terms of wording, behaviors, and referents used, may be more appropriate for capturing the nature of burnout in this specific population. I would also suggest that researchers examine sub-dimensions in addition to overall burnout. The results of the current study showed that significant relationships were observed when examining narrower facets of burnout, which may have been masked when only examining burnout as a molar construct.

Further investigation into the differences in findings between the different forms (physical and psychological), and various types (Type I, Type II, and ambient) of workplace aggression would also add to our knowledge of the mechanisms behind the observed relationships. No clear pattern emerged in the data of the current study, but the evidence supports that there are differences in the nature of these relationships, dependent upon the type and the form of the workplace aggression being tested. There were also differences observed regarding relationships with the separate dimensions of burnout-disengagement and exhaustion. Future research examining these differences further will only make for a richer understanding of the aggression-burnout link.

This study only investigated two types of individual difference variables as moderators of the relationship between workplace aggression and teacher burnout. Investigating other individual factors that may mitigate or exacerbate the effects of

workplace aggression on teacher burnout can be essential in helping to further approximate a personality profile of teachers who may be most robust in resistance to burnout caused by aggression. Factors that might strengthen the link between experiencing workplace aggression and burnout, such as generalized negative affect, can also inform the profile of desired candidates for teaching positions. Although there can be dark sides and positives sides realized in the same personality trait (e.g. Baumeister, Smart, & Bowman, 2006; Hogan, Rasking, & Fazzini, 1990), a better understanding of which types of traits are more often linked to well-being in the contexts of aggressive schools is useful. The study of individual attribution tendencies may also shed light on the role of trait differences underlying moderating effects of workplace aggression-burnout relationships.

Considering the fact that these moderators seemed to have the most effect on burnout levels when psychological aggression was low, future research should investigate moderators for which positive buffering effects may hold in school environments characterized by high levels of psychological and physical aggression targeted at teachers and occurring between students. The investigation of factors that may help retain quality educators was a main aim in the current study, and is a noble goal for occupational health psychology research in general. Had it not been for the foundational education we all received, we would not be in the field that we are today. I strongly encourage all further inquiry into this, and related topics. We owe it to our nation's teachers, and tomorrow's future- which lies largely in their hands.

Table 1

Participant Demographics

		Frequency (*n*)	Percentage (%)
Gender			
	Male	57	37.7
	Female	94	62.3
Race			
	Caucasian/White	113	74.3
	African American/Black	34	22.4
	Native Hawaiian/Other Pacific Islander	1	0.7
	Hispanic/Latino	2	1.3
	Asian	1	0.7
	Other	1	0.7
		Mean	Standard Deviation
Age		38.53	10.84
Income		4.68	1.56
Time With Current Supervisor		2.95	1.06
Organizational Tenure		3.08	1.33
Occupational Tenure		4.15	1.77

Note. Age (*n*= 148); Income (*n*= 139); Time with Current Supervisor (*n*= 148); Organizational Tenure (*n*= 141), Occupational Tenure (*n*= 141). The following variables were reported by participants on categorical Likert scales, each point representing the range of years, or income bracket as follows: Income (1= less than $20k; 2= $25-$35k; 3= $36-$50k; 4= $51-$70k; 5= $71-$85k; 6= $86-$100k; 7= over $100k), Time with Current Supervisor (1= Less than 3 months; 2= 3 months-1 year; 3= 1-3 years; 4= 3-5 years; 5= 5+ years), Organizational Tenure (1= Less than a year; 2= 1-3 years; 3= 3-5 years; 4= 5-10 years; 5= 10+ years), Occupational Tenure (1= Less than a year; 2= 1-3 years; 3= 3-5 years; 4= 5-10 years; 5= 10-15 years; 6= 15-20 years; 7= 20+ years). Age reported in years.

Table 2

Study Scale Descriptive Statistics

	(*n*)	Mean	SD	Scale
Violence Prevention Climate				
Practices and Response	150	4.35	1.11	1 – 6
Policies and Procedures	149	3.84	1.24	1 – 6
Pressure for Unsafe Practices	150	4.30	1.24	1 – 6
Burnout				
Overall	146	3.33	0.39	1 – 6
Disengagement	146	3.25	0.49	1 – 6
Exhaustion	146	3.40	0.42	1 – 6
Physical Aggression				
Type II	149	1.90	1.16	1 – 6
Type III	150	1.77	1.28	1 – 6
Ambient	149	2.35	1.00	1 – 6
Psychological Aggression				
Type II	147	2.25	1.26	1 – 6
Type III	150	2.19	1.30	1 – 6
Ambient	148	3.33	1.27	1 – 6
Locus of Control	147	3.62	0.52	1 – 5
Communal Orientation	146	3.67	0.66	1 – 5

Note: *Type II* aggression refers to that in which students are the perpetrators towards teachers. *Type III* aggression refers to that in which other school faculty are the perpetrators towards teachers. *Ambient* aggression refers to that which occurs between students (teachers are exposed to, but not the direct targets of)

Table 3

Variable Zero-Order Correlations

	Scale Name	1	2	3	4	5	6	7	8	9	10
1	Income†	(--)									
2	Organizational Tenure†	.50**	(--)								
3	Occupational Tenure†	.40**	.73**	(--)							
4	VPC Practices & Response	.10	.17*	.24**	(.84)						
5	VPC Policies & Procedures	.15	.25**	.22**	.63**	(.92)					
6	VPC Pressure for Unsafe Practices	.14	.16	.37**	.30**	.04	(.91)				
7	Burnout- overall	.18*	.14	-.07	-.27**	-.18*	-.29**	(.79)			
8	Burnout- Disengagement	.17*	.08	-.15	-.32**	-.13	-.42**	.88**	(.74)		
9	Burnout- Exhaustion	.12	.16	.04	-.12	-.17*	-.05	.83**	.46**	(.68)	
10	Type III aggression- Physical	-.05	-.08	-.34**	-.07	.23**	-.68**	.23**	.36**	-.01	(.98)
11	Type III aggression- Psychological	-.08	.05	-.13	-.12	.11	-.55**	.28**	.34**	.12	.83**
12	Type II aggression- Physical	-.11	-.07	-.31**	-.15	.17*	-.61**	.25**	.32**	.09	.88**
13	Type II aggression- Psychological	-.22*	-.08	-.22*	-.32**	-.18*	-.39**	.23**	.21*	.17*	.47**
14	Ambient aggression- Physical	-.13	-.13	-.33**	-.26**	-.05	-.53**	.23**	.28**	.09	.62**
15	Ambient aggression- psychological	-.20*	-.18*	-.18**	.15	-.24**	-.21*	.03	.01	.04	.13
16	Locus of Control	.02	.17*	.43**	.26**	-.04	.53**	-.35**	-.39**	-.20*	-.67**
17	Communal Orientation	-.04	.17*	.38**	.32**	-.06	.53**	-.22**	-.38**	.02	-.62**

Note: Scale reliabilities are shown in parentheses on the diagonal. *VPC* is "Violence Prevention Climate."

** $p < .01$, * $p < .05$

† Control Variable

	Scale Name	11	12	13	14	15	16	17
1	Income†							
2	Organizational Tenure†							
3	Occupational Tenure†							
4	VPC Practices & Response							
5	VPC Policies & Procedures							
6	VPC Pressure for Unsafe Practices							
7	Burnout- overall							
8	Burnout- Disengagement							
9	Burnout- Exhaustion							
10	Type III aggression- Physical							
11	Type III aggression- Psychological	(.90)						
12	Type II aggression- Physical	.82**	(.96)					
13	Type II aggression- Psychological	.61**	.68**	(.86)				
14	Ambient aggression- Physical	.59**	.74**	.65**	(.91)			
15	Ambient aggression- psychological	.33**	.24**	.59**	.62**	(.86)		
16	Locus of Control	-.53**	-.64**	-.32**	-.47**	.01	(.88)	
17	Communal Orientation	-.50**	-.55**	-.26**	-.39**	.03	.66**	(.84)

Note: Scale reliabilities are shown in parentheses on the diagonal. *VPC* is "Violence Prevention Climate."
** $p < .01$, * $p < .05$
† Control Variable

Table 4a

Hierarchical Regression Analysis Results for Hypothesis 1a and 1b (Type II aggression)

	Overall Burnout	
Variable	Step 1	Step 2
Step 1:		
Occupational Tenure	-.17	-.10
Income	.24*	.26**
Step 2:		
Physical Aggression $_{\text{Type II}}$		.15
Psychological Aggression $_{\text{Type II}}$		.11
R^2	.05*	.11**
ΔR^2		.05**

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Table 4b

Hierarchical Regression Analysis Results for Hypothesis 1a and 1b (Type III aggression)

	Overall Burnout	
Variable	Step 1	Step 2
Step 1:		
Occupational Tenure	-.16	-.17
Income	.24*	.27**
Step 2:		
Physical Aggression $_{\text{Type III}}$		-.21
Psychological Aggression $_{\text{Type III}}$		.46**
R^2	.05*	.14**
ΔR^2		.09**

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Table 4c

Hierarchical Regression Analysis Results for Hypothesis 1a and 1b (Ambient aggression)

	Overall Burnout	
Variable	Step 1	Step 2
Step 1:		
Occupational Tenure	-.17	-.10
Income	.24*	.22*
Step 2:		
Physical Aggression $_{\text{Ambient}}$		.26*
Psychological Aggression $_{\text{Ambient}}$		-.14
R^2	.05*	.09*
ΔR^2		.04

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Table 5a
Hierarchical Regression Analysis Results for Hypothesis 2a (Type II aggression)

		Overall Burnout	
Variable	Step 1	Step 2	Step 3
Step 1:			
Occupational Tenure	-.15	-.02	-.01
Income	.26**	.27**	.27**
Step 2:			
Physical Aggression $_{\text{Type II}}$		.30*	.26
Psychological Aggression $_{\text{Type II}}$		-.02	.01
VPC Practices & Response		-.25**	-.26*
Step 3:			
Physical Aggression $_{\text{Type II}}$ and VPC Policies & Procedure Interaction Term			.03
Psychological Aggression $_{\text{Type II}}$ and VPC Policies & Procedure Interaction Term			.05
R^2	.06*	.15**	.16**
ΔR^2		.10**	.00

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Table 5b
Hierarchical Regression Analysis Results for Hypothesis 2a (Type III aggression)

		Overall Burnout	
Variable	Step 1	Step 2	Step 3
Step 1:			
Occupational Tenure	-.15	-.06	-.05
Income	.25**	.28**	.25**
Step 2:			
Physical Aggression $_{\text{Type III}}$		-.00	-.03
Psychological Aggression $_{\text{Type III}}$		.31	.40*
VPC Policies & Procedures		-.22*	-.26*
Step 3:			
Physical Aggression $_{\text{Type III}}$ and VPC Policies & Procedures Interaction Term			-.20
Psychological Aggression $_{\text{Type III}}$ and VPC Policies & Procedures Interaction Term			.17
R^2	.06*	.18**	.19**
ΔR^2		.12**	.01

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Table 5c
Hierarchical Regression Analysis Results for Hypothesis 2a (Ambient aggression)

		Overall Burnout	
Variable	Step 1	Step 2	Step 3
Step 1:			
Occupational Tenure	-.15	-.04	-.02
Income	.26**	.24**	.25**
Step 2:			
Physical Aggression $_{Ambient}$		.31**	.28*
Psychological Aggression $_{Ambient}$		-.25*	-.16
VPC Policies & Procedures		-.24**	-.24**
Step 3:			
Physical Aggression $_{Ambient}$ and VPC Policies & Procedures Interaction Term			.02
Psychological Aggression $_{Ambient}$ and VPC Policies & Procedures Interaction Term			.20
R^2	.06*	.14**	.19**
ΔR^2		.09**	.04*

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Table 6a
Hierarchical Regression Analysis Results for Hypothesis 2b (Type II aggression)

		Overall Burnout	
Variable	Step 1	Step 2	Step 3
Step 1:			
Occupational Tenure	-.17	-.06	-.05
Income	.24*	.25**	.25**
Step 2:			
Physical Aggression $_{\text{Type II}}$		.18	.14
Psychological Aggression $_{\text{Type II}}$		.04	.08
VPC Practices & Response		-.22*	-.28**
Step 3:			
Physical Aggression $_{\text{Type II}}$ and VPC Practices & Response Interaction Term			.06
Psychological Aggression $_{\text{Type II}}$ and VPC Practices & Response Interaction Term			.20*
R^2	.05*	.15**	.19**
ΔR^2		.09**	.05*

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Table 6b
Hierarchical Regression Analysis Results for Hypothesis 2b (Ambient aggression)

		Overall Burnout	
Variable	Step 1	Step 2	Step 3
Step 1:			
Occupational Tenure	-.17	-.07	-.04
Income	.24*	.23*	.20*
Step 2:			
Physical Aggression $_{Ambient}$		.21	.18
Psychological Aggression $_{Ambient}$		-.13	-.09
VPC Practices & Response		-.22*	-.22**
Step 3:			
Physical Aggression $_{Ambient}$ and VPC Practices & Response Interaction Term			.01
Psychological Aggression $_{Ambient}$ and VPC Practices & Response Interaction Term			.23*
R^2	.05*	.13**	.19**
ΔR^2		.08**	.05*

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Table 6c
Hierarchical Regression Analysis Results for Hypothesis 2b (Type III aggression)

	Overall Burnout		
Variable	Step 1	Step 2	Step 3
Step 1:			
Occupational Tenure	-.16	-.11	-.11
Income	.24**	.26**	.25**
Step 2:			
Physical Aggression $_{\text{Type III}}$		-.14	-.23
Psychological Aggression $_{\text{Type III}}$		.38*	.44**
VPC Practices & Response		-.19*	-.19*
Step 3:			
Physical Aggression $_{\text{Type III}}$ and VPC Practices & Response Interaction Term			-.15
Psychological Aggression $_{\text{Type III}}$ and VPC Practices & Response Interaction Term			.26
R^2	.05*	.18**	.20**
ΔR^2		.12**	.16

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Table 7a
Hierarchical Regression Analysis Results for Hypothesis 2c (Type II aggression)

	Overall Burnout		
Variable	Step 1	Step 2	Step 3
Step 1:			
Occupational Tenure	-.17	-.06	-.05
Income	.24**	.27**	.27**
Step 2:			
Physical Aggression $_{\text{Type II}}$		.00	.10
Psychological Aggression $_{\text{Type II}}$		.13	.10
VPC Pressure for Unsafe Practices		-.27*	-.16
Step 3:			
Physical Aggression $_{\text{Type II}}$ and VPC Pressure for Unsafe Practices Interaction Term			.07
Psychological Aggression $_{\text{Type II}}$ and VPC Pressure for Unsafe Practices Interaction Term			.11
R^2	.05*	.14**	.16**
ΔR^2		.09**	.02

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Table 7b
Hierarchical Regression Analysis Results for Hypothesis 2c (Type III aggression)

		Overall Burnout	
Variable	Step 1	Step 2	Step 3
Step 1:			
Occupational Tenure	-.16	-.14	-.12
Income	.24*	.29**	.27**
Step 2:			
Physical Aggression $_{\text{Type III}}$		-.37*	.06
Psychological Aggression $_{\text{Type III}}$		.45**	.39*
VPC Pressure for Unsafe Practices		-.27*	-.16
Step 3:			
Physical Aggression $_{\text{Type III}}$ and VPC Pressure for Unsafe Practices Interaction Term			.05
Psychological Aggression $_{\text{Type III}}$ and VPC Pressure for Unsafe Practices Interaction Term			.20
R^2	.05*	.18**	.20**
ΔR^2		.13**	.02

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Table 7c
Hierarchical Regression Analysis Results for Hypothesis 2c (Ambient aggression)

		Overall Burnout	
Variable	Step 1	Step 2	Step 3
Step 1:			
Occupational Tenure	-.17*	-.05	-.05
Income	.24*	.25**	.24**
Step 2:			
Physical Aggression $_{Ambient}$		.11	.16
Psychological Aggression $_{Ambient}$		-.08	-.10
VPC Pressure for Unsafe Practices		-.25*	-.27**
Step 3:			
Physical Aggression $_{Ambient}$ and VPC Pressure for Unsafe Practices Interaction Term			.15
Psychological Aggression $_{Ambient}$ and VPC Pressure for Unsafe Practices Interaction Term			-.05
R^2	.05*	.13**	.15**
ΔR^2		.08**	.01

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Table 8a
Hierarchical Regression Analysis Results for Hypothesis 3 (Type II aggression)

		Overall Burnout	
Variable	Step 1	Step 2	Step 3
Step 1:			
Occupational Tenure	-.17	.01	-.00
Income	.24*	.20*	.21*
Step 2:			
Physical Aggression $_{\text{Type II}}$		-.10	.12
Psychological Aggression $_{\text{Type II}}$		.17	.12
LOC		-.38**	-.37*
Step 3:			
Physical Aggression $_{\text{Type II}}$ and LOC Interaction Term			.19
Psychological Aggression $_{\text{Type II}}$ and LOC Interaction Term			.04
R^2	.05*	.18**	.19**
ΔR^2		.12**	.01

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Table 8b
Hierarchical Regression Analysis Results for Hypothesis 3 (Type III aggression)

		Overall Burnout	
Variable	Step 1	Step 2	Step 3
Step 1:			
Occupational Tenure	-.17	-.07	-.08
Income	.24*	.22*	.23**
Step 2:			
Physical Aggression $_{\text{Type III}}$		-.38*	-.06
Psychological Aggression $_{\text{Type III}}$		.43**	.40*
LOC		-.35**	-.18
Step 3:			
Physical Aggression $_{\text{Type III}}$ and LOC Interaction Term			.06
Psychological Aggression $_{\text{Type III}}$ and LOC Interaction Term			.21
R^2	.05*	.21**	.22**
ΔR^2		.15**	.01

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Table 8c
Hierarchical Regression Analysis Results for Hypothesis 3 (Ambient aggression)

		Overall Burnout	
Variable	Step 1	Step 2	Step 3
Step 1:			
Occupational Tenure	-.17	.02	.03
Income	.24*	.18*	.18
Step 2:			
Physical Aggression $_{Ambient}$		.03	.10
Psychological Aggression $_{Ambient}$		.03	-.01
LOC		-.36**	-.32**
Step 3:			
Physical Aggression $_{Ambient}$ and LOC Interaction Term			.11
Psychological Aggression $_{Ambient}$ and LOC Interaction Term			-.00
R^2	.05*	.16**	.17**
ΔR^2		.11**	.01

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Table 9a
Hierarchical Regression Analysis Results for Hypothesis 4 (Type II aggression)

	Overall Burnout		
Variable	Step 1	Step 2	Step 3
Step 1:			
Occupational Tenure	-.17	-.06	-.05
Income	.24**	.23*	.23*
Step 2:			
Physical Aggression $_{\text{Type II}}$		.08	.12
Psychological Aggression $_{\text{Type II}}$		.13	.10
Communal Orientation		-.13	-.07
Step 3:			
Physical Aggression $_{\text{Type II}}$ and Communal Orientation Interaction Term			-.06
Psychological Aggression $_{\text{Type II}}$ and Communal Orientation Interaction Term			.12
R^2	.06*	.11**	.12*
ΔR^2		-.06*	.01

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Table 9b
Hierarchical Regression Analysis Results for Hypothesis 4 (Type III aggression)

		Overall Burnout	
Variable	Step 1	Step 2	Step 3
Step 1:			
Occupational Tenure	-.16	-.14	-.14
Income	.24*	.25**	.23*
Step 2:			
Physical Aggression $_{\text{Type III}}$		-.25	-.27
Psychological Aggression $_{\text{Type III}}$		.45**	.51**
Communal Orientation		-.10	-.08
Step 3:			
Physical Aggression $_{\text{Type III}}$ and Communal Orientation Interaction Term			-.16
Psychological Aggression $_{\text{Type III}}$ and Communal Orientation Interaction Term			.25
R^2	.05*	.15**	.17**
ΔR^2		.10**	.02

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Table 9c
Hierarchical Regression Analysis Results for Hypothesis 4 (Ambient aggression)

	Overall Burnout		
Variable	Step 1	Step 2	Step 3
Step 1:			
Occupational Tenure	-.17	-.06	-.02
Income	.24**	.20*	.17
Step 2:			
Physical Aggression $_{Ambient}$		.18	.17
Psychological Aggression $_{Ambient}$		-.08	-.10
Communal Orientation		-.13	-.14
Step 3:			
Physical Aggression $_{Ambient}$ and Communal Orientation Interaction Term			-.13
Psychological Aggression $_{Ambient}$ and Communal Orientation Interaction Term			.21
R^2	.06*	.10*	.13*
ΔR^2		.05	.02

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Table 10a

Hierarchical Regression Supplemental Analysis Results for Hypothesis 1a and 1b (Ambient aggression)

	Disengagement	
Variable	Step 1	Step 2
Step 1:		
Occupational Tenure	-.26**	-.17
Income	.28**	.24**
Step 2:		
Physical Aggression $_{\text{Ambient}}$		.36**
Psychological Aggression $_{\text{Ambient}}$		-.23*
R^2	.09**	.16**
ΔR^2		.08**

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Table 10b

Hierarchical Regression Supplemental Analysis Results for Hypothesis 1a and 1b (Type II aggression)

	Disengagement	
Variable	Step 1	Step 2
Step 1:		
Occupational Tenure	-.26**	-.17
Income	.28**	.28**
Step 2:		
Physical Aggression $_{\text{Type II}}$		.27**
Psychological Aggression $_{\text{Type II}}$		.02
R^2	.09**	.16**
ΔR^2		.13**

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Table 10c

Hierarchical Regression Supplemental Analysis Results for Hypothesis 1a and 1b (Type III aggression)

	Exhaustion	
Variable	Step 1	Step 2
Step 1:		
Occupational Tenure	.00	-.10
Income	.12	.18
Step 2:		
Physical Aggression $_{\text{Type III}}$		-.51**
Psychological Aggression $_{\text{Type III}}$		.55**
R^2	.01	.09*
ΔR^2		.08**

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Table 11a

Hierarchical Regression Supplemental Analysis Results for Hypothesis 2c (Type II aggression)

		Disengagement	
Variable	Step 1	Step 2	Step 3
Step 1:			
Occupational Tenure	-.26**	-.11	-.09
Income	.27**	.29**	.28**
Step 2:			
Physical Aggression $_{\text{Type II}}$		.04	.08
Psychological Aggression $_{\text{Type II}}$		.04	.01
VPC Practices & Response		-.38**	-.32**
Step 3:			
Physical Aggression $_{\text{Type II}}$ and VPC Practices & Response Interaction Term			-.15
Psychological Aggression $_{\text{Type II}}$ and VPC Practices & Response Interaction Term			.25*
R^2	.09**	.24**	.28**
ΔR^2		.15**	.04**

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Table 11b
Hierarchical Regression Supplemental Analysis Results for Hypothesis 2c (Type III aggression)

		Disengagement	
Variable	Step 1	Step 2	Step 3
Step 1:			
Occupational Tenure	-.26**	-.14	-.12
Income	.27**	.29**	.28**
Step 2:			
Physical Aggression $_{\text{Type III}}$		-.10	.25
Psychological Aggression $_{\text{Type III}}$		.25	.16
VPC Practices & Response		-.34**	-.23
Step 3:			
Physical Aggression $_{\text{Type III}}$ and VPC Practices & Response Interaction Term			-.04
Psychological Aggression $_{\text{Type III}}$ and VPC Practices & Response Interaction Term			.32*
R^2	.08**	.26**	.29**
ΔR^2		.17**	.03*

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Table 11c
Hierarchical Regression Supplemental Analysis Results for Hypothesis 2c (Type II aggression, all perpetrators included in one model)

		Disengagement	
Variable	Step 1	Step 2	Step 3
Step 1:			
Occupational Tenure	-.25**	-.06	-.07
Income	.28**	.28**	.25**
Step 2:			
Physical Aggression $_{\text{Type II}}$		.14	.07
Psychological Aggression $_{\text{Type II}}$		-.06	-.07
VPC Policies & Procedures		-.06	-.09
VPC Practices & Response		-.18	-.20
VPC Pressure for Unsafe Practices		-.31**	-.14
Step 3:			
Physical Aggression $_{\text{Type II}}$ and VPC Policies & Procedures Interaction Term			.12
Psychological Aggression $_{\text{Type II}}$ and VPC Policies & Procedures Interaction Term			-.13
Physical Aggression $_{\text{Type II}}$ and VPC Practices & Response Interaction Term			-.12
Psychological Aggression $_{\text{Type II}}$ and VPC Practices & Response Interaction Term			.30*
Physical Aggression $_{\text{Type II}}$ and VPC Pressure for Unsafe Practices Interaction Term			-.28
Psychological Aggression $_{\text{Type II}}$ and VPC Pressure for Unsafe Practices Interaction Term			.23*
R^2	.09**	.28**	.35**
ΔR^2		.20**	.07*

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Table 11d

Hierarchical Regression Supplemental Analysis Results for Hypothesis 2c (Ambient aggression, all perpetrators included in one model)

		Disengagement	
Variable	Step 1	Step 2	Step 3
Step 1:			
Occupational Tenure	.02	.08	.05
Income	.14	.15	.16
Step 2:			
Physical Aggression $_{Ambient}$		.11	.09
Psychological Aggression $_{Ambient}$		-.10	.04
VPC Policies & Procedures		-.27*	-.19
VPC Practices & Response		.10	.04
VPC Pressure for Unsafe Practices		-.04	-.02
Step 3:			
Physical Aggression $_{Ambient}$ and VPC Policies & Procedures Interaction Term			.05
Psychological Aggression $_{Ambient}$ and VPC Policies & Procedures Interaction Term			.16
Physical Aggression $_{Ambient}$ and VPC Practices & Response Interaction Term			-.18
Psychological Aggression $_{Ambient}$ and VPC Practices & Response Interaction Term			.11
Physical Aggression $_{Ambient}$ and VPC Pressure for Unsafe Practices Interaction Term			.23
Psychological Aggression $_{Ambient}$ and VPC Pressure for Unsafe Practices Interaction Term			-.29*
R^2	.02	.06	.13
ΔR^2		.04	.06

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Table 12a
Hierarchical Regression Supplemental Analysis Results for Hypothesis 3 (Type II aggression)

		Exhaustion	
Variable	Step 1	Step 2	Step 3
Step 1:			
Occupational Tenure	-.00	.11	.06
Income	.12	.10	.14
Step 2:			
Physical Aggression $_{\text{Type II}}$		-.26	.22
Psychological Aggression $_{\text{Type II}}$		.24*	.16
LOC		-.33**	-.45**
Step 3:			
Physical Aggression $_{\text{Type II}}$ and LOC Interaction Term			.63**
Psychological Aggression $_{\text{Type II}}$ and LOC Interaction Term			-.09
R^2	.01	.10*	.16**
ΔR^2		.08*	.06*

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Table 12b
Hierarchical Regression Supplemental Analysis Results for Hypothesis 3 (Ambient aggression)

		Exhaustion	
Variable	Step 1	Step 2	Step 3
Step 1:			
Occupational Tenure	-.00	.12	.10
Income	.12	.09	.11
Step 2:			
Physical Aggression $_{\text{Ambient}}$		-.16	-.05
Psychological Aggression $_{\text{Ambient}}$		.17	.12
LOC		-.32**	-.29*
Step 3:			
Physical Aggression $_{\text{Ambient}}$ and LOC Interaction Term			.28*
Psychological Aggression $_{\text{Ambient}}$ and LOC Interaction Term			-.18
R^2	.01	.08	.11*
ΔR^2		.06*	.03

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Table 13
Hierarchical Regression Supplemental Analysis Results for Hypothesis 4 (Ambient aggression)

		Disengagement	
Variable	Step 1	Step 2	Step 3
Step 1:			
Occupational Tenure	-.26**	-.08	-.05
Income	.28**	.20*	.18*
Step 2:			
Physical Aggression $_{Ambient}$		.22	.17
Psychological Aggression $_{Ambient}$		-.13	-.12
Communal Orientation		-.27**	-.27**
Step 3:			
Physical Aggression $_{Ambient}$ and Communal Orientation Interaction Term			-.23*
Psychological Aggression $_{Ambient}$ and Communal Orientation Interaction Term			.25*
R^2	.09**	.21**	.24**
ΔR^2		.12**	.03

Note. N = 146. Standardized regression coefficients (βs) are reported.
* $p < .05$. ** $p < .01$.

Figure 1. Hypothesized model depicting relationships of workplace aggression with burnout (moderated by VPC dimensions, communal orientation, and LOC).

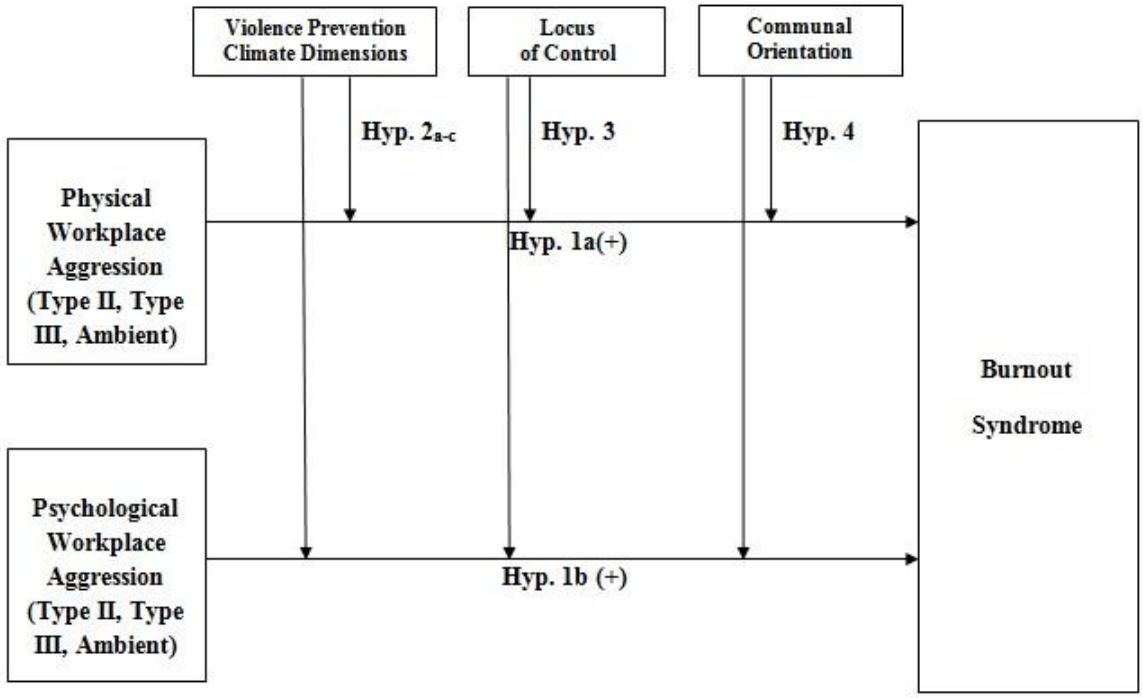


Figure 2. Type II Psychological Aggression and VPC Practices & Response Interaction

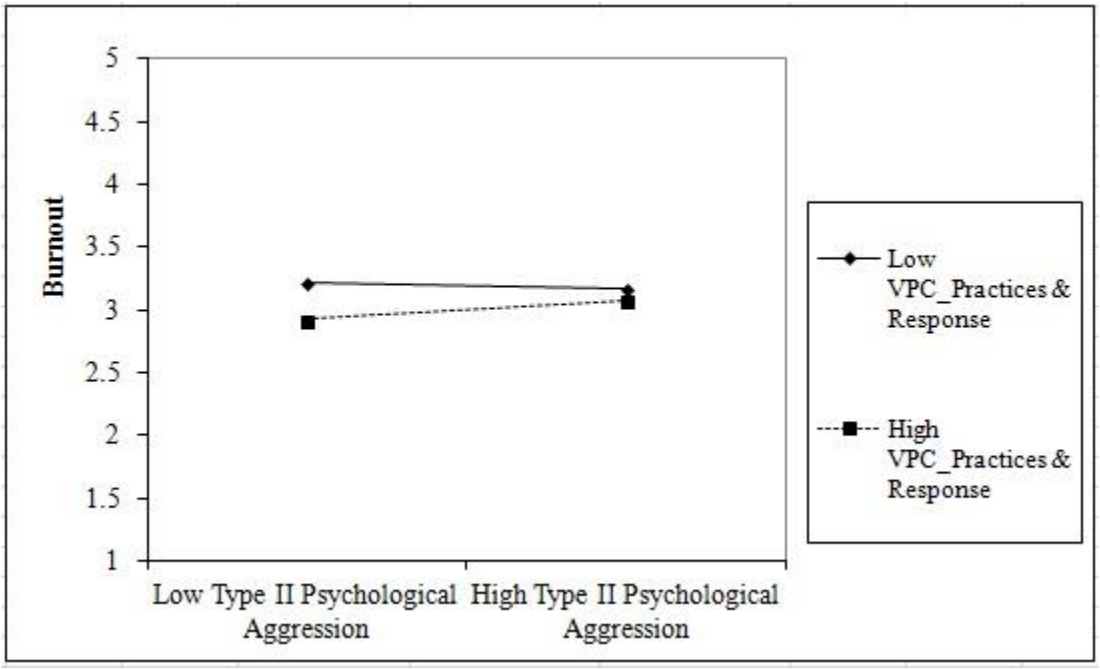


Figure 3. Ambient Psychological Aggression and VPC Practices & Response Interaction

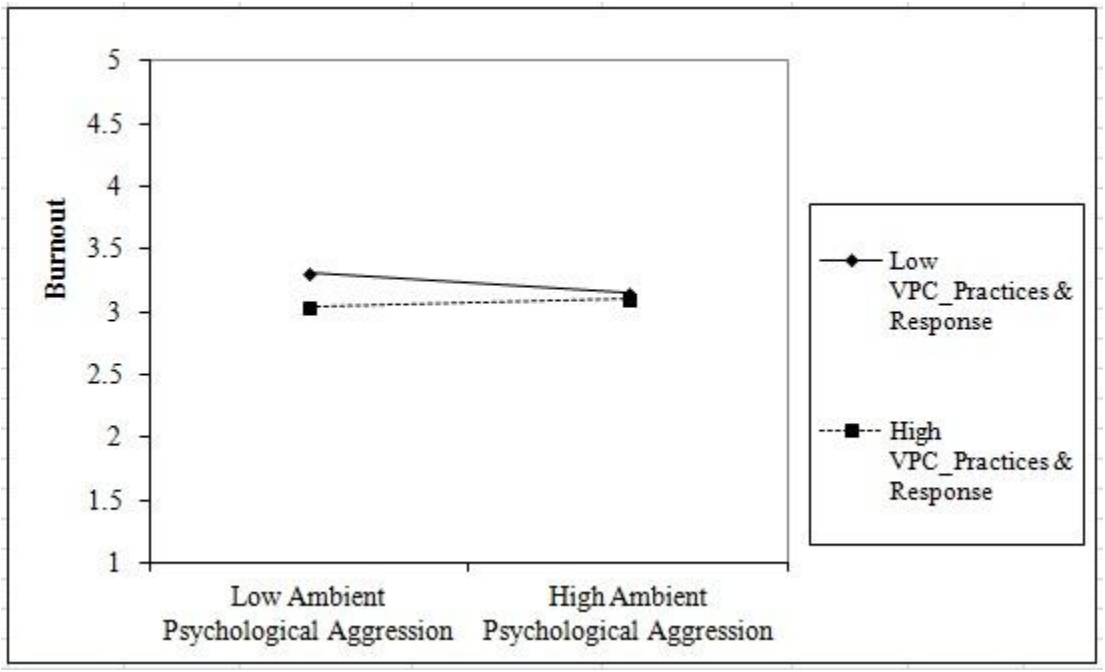


Figure 4. Supplemental Analysis: Type II Psychological Aggression and VPC Pressure for Unsafe Practices Interaction

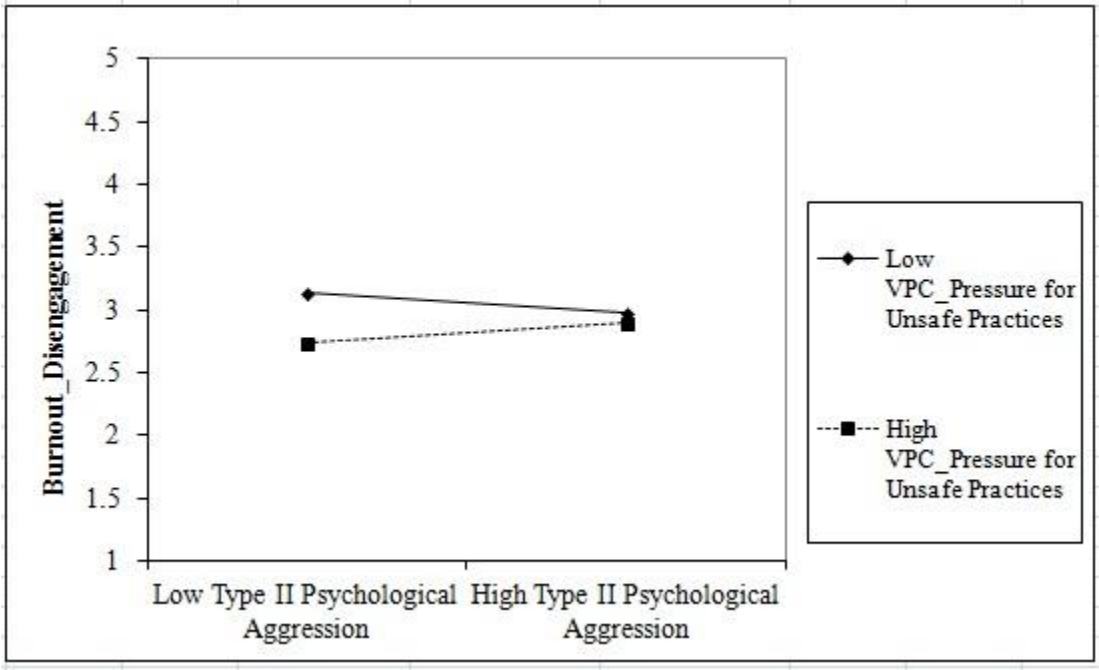


Figure 5. Supplemental Analysis: Type III Psychological Aggression and VPC Pressure for Unsafe Practices Interaction

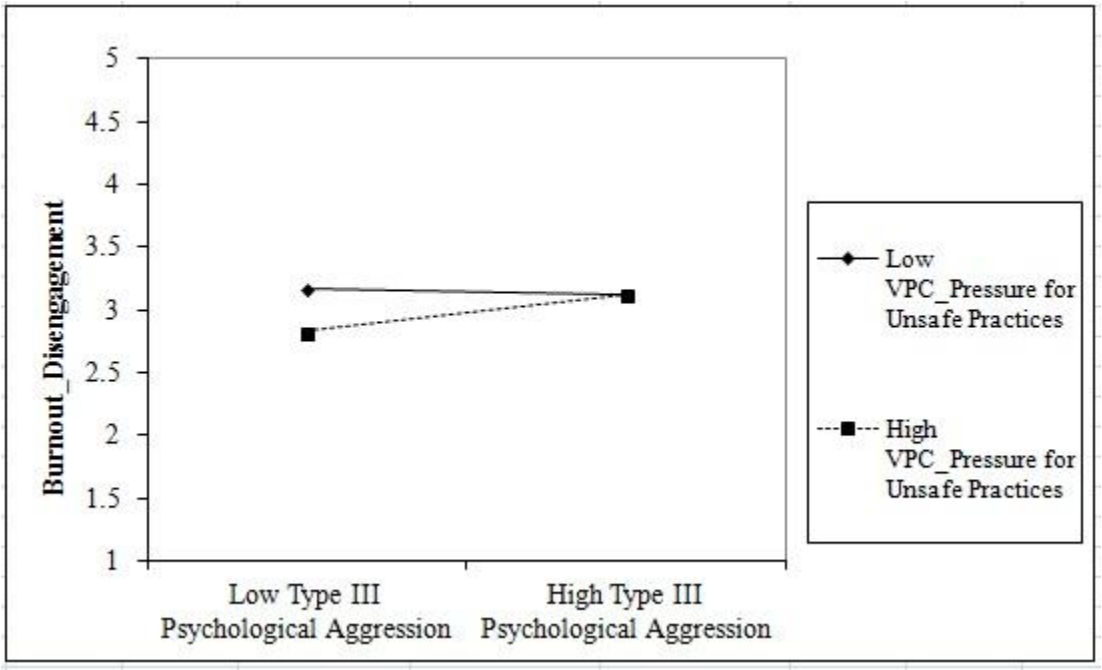


Figure 6. Supplemental Analysis: Type II Psychological Aggression and VPC Pressure for Unsafe Practices Interaction (all VPC dimensions entered in one model)

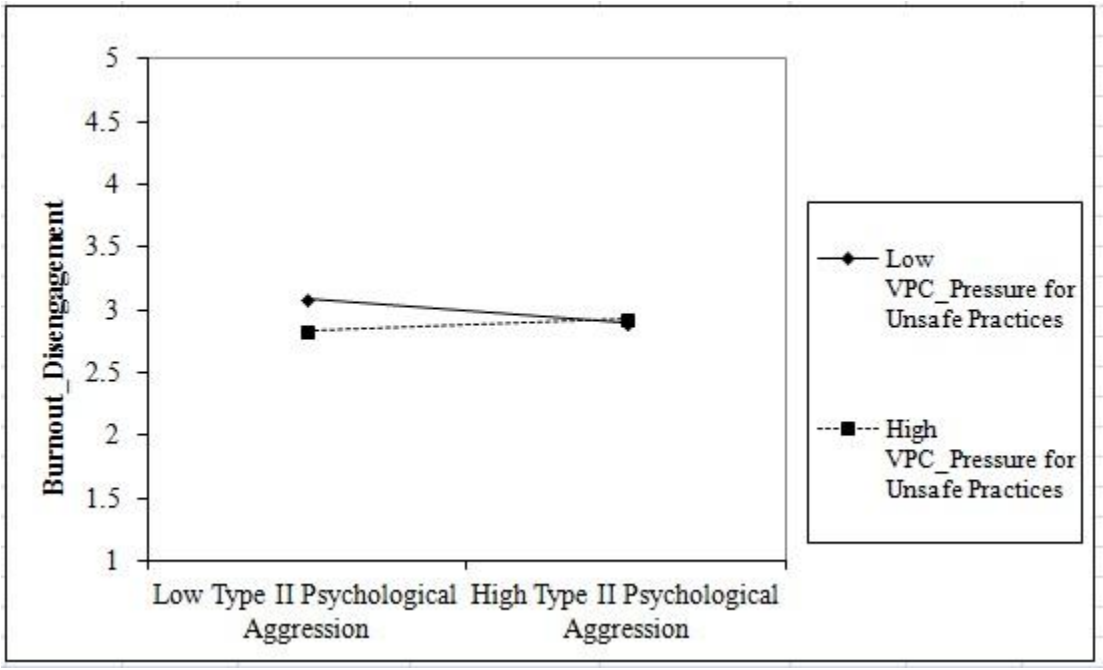


Figure 7. Supplemental Analysis: Ambient Psychological Aggression and VPC Pressure for Unsafe Practices Interaction (all VPC dimensions entered in one model)

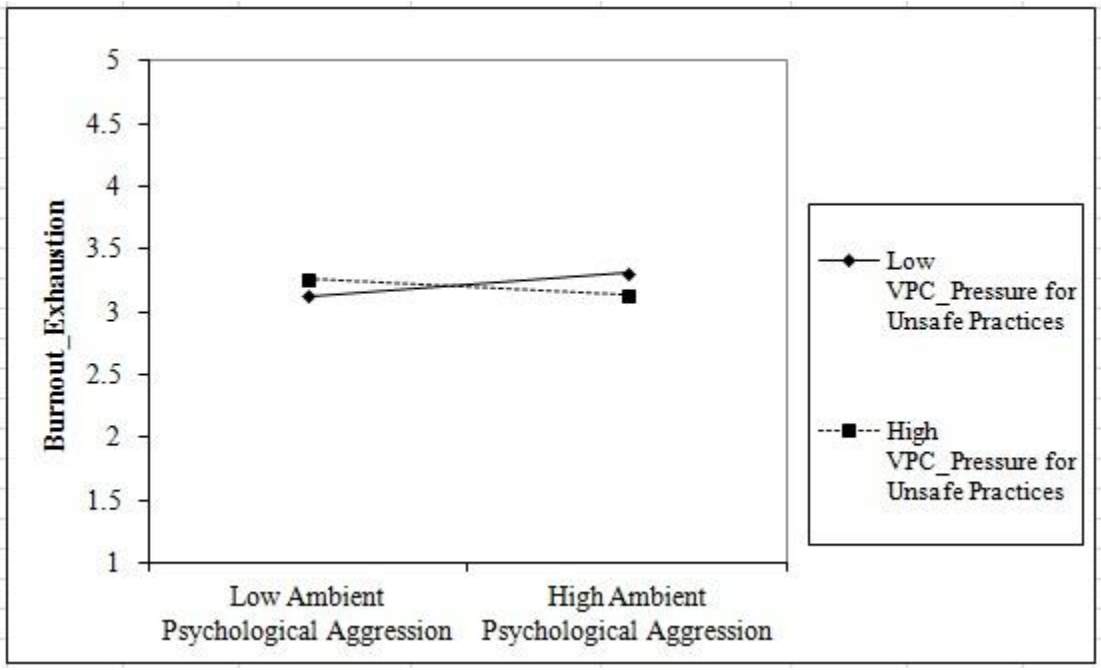


Figure 8. Supplemental Analysis: Type II Physical Aggression and LOC Interaction

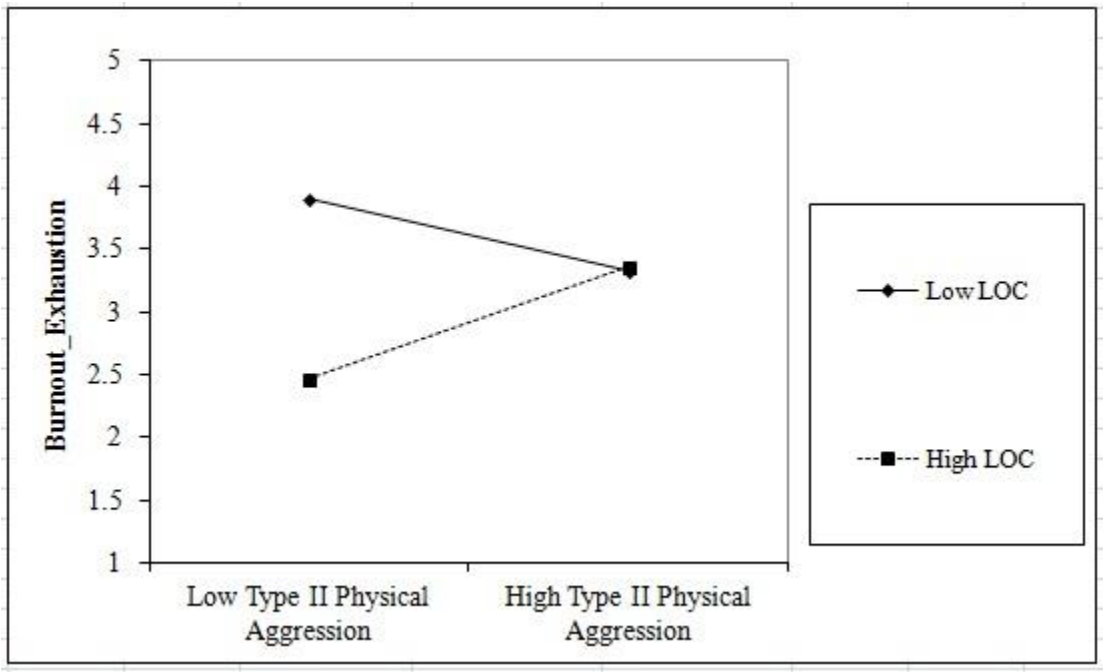


Figure 9. Supplemental Analysis: Ambient Physical Aggression and LOC Interaction

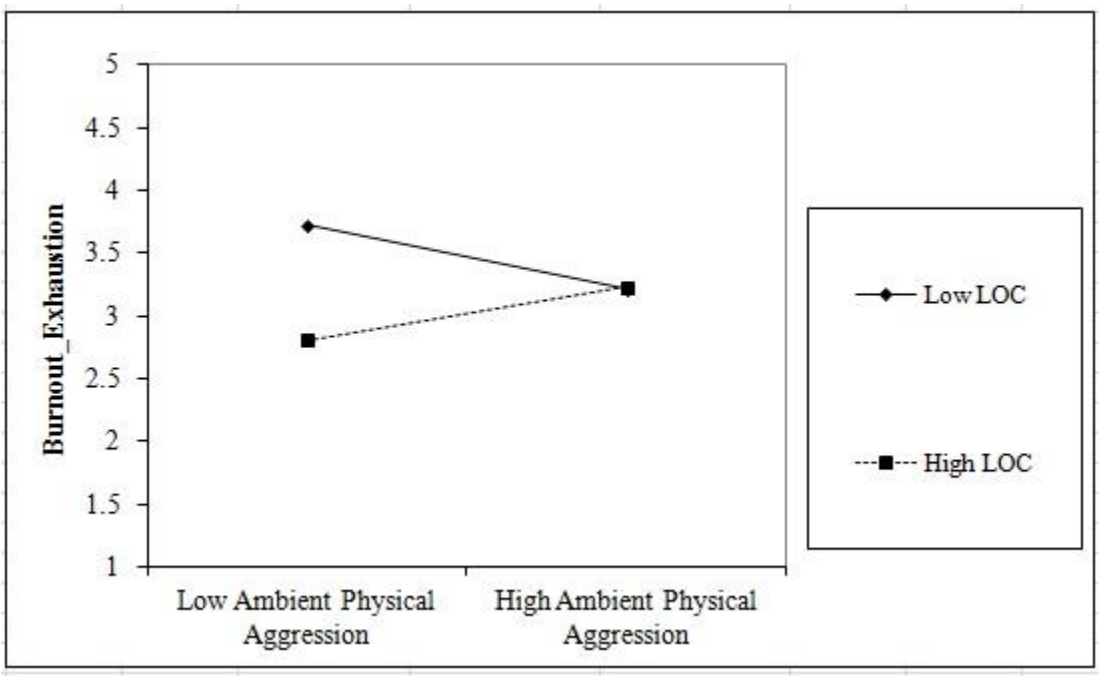


Figure 10. Supplemental Analysis: Ambient Physical Aggression and Communal Orientation Interaction

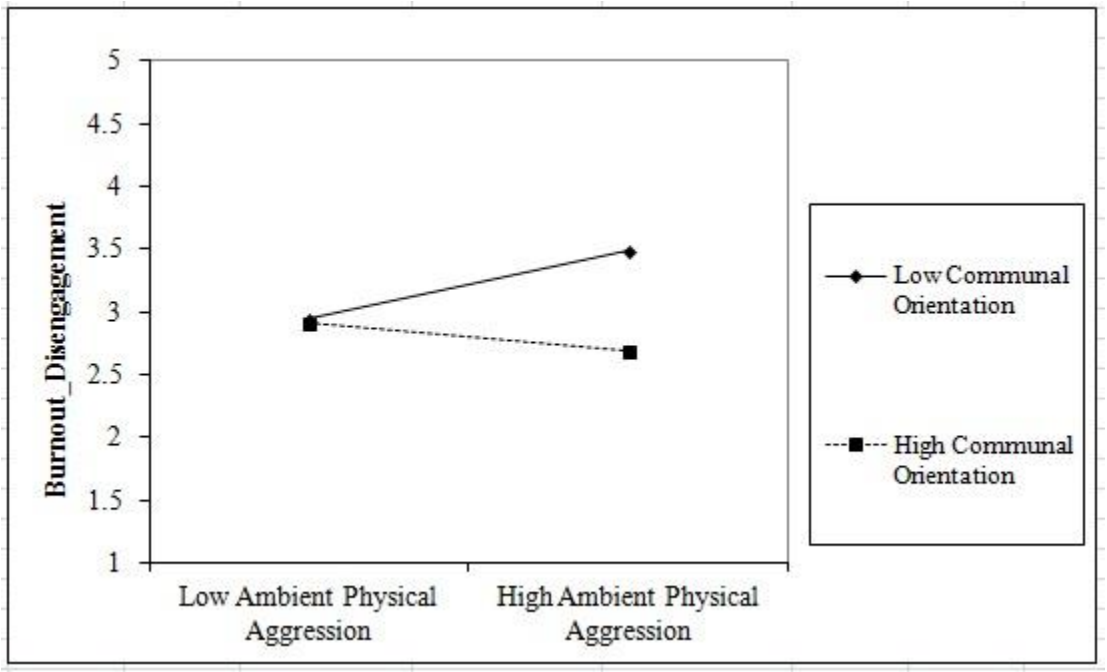
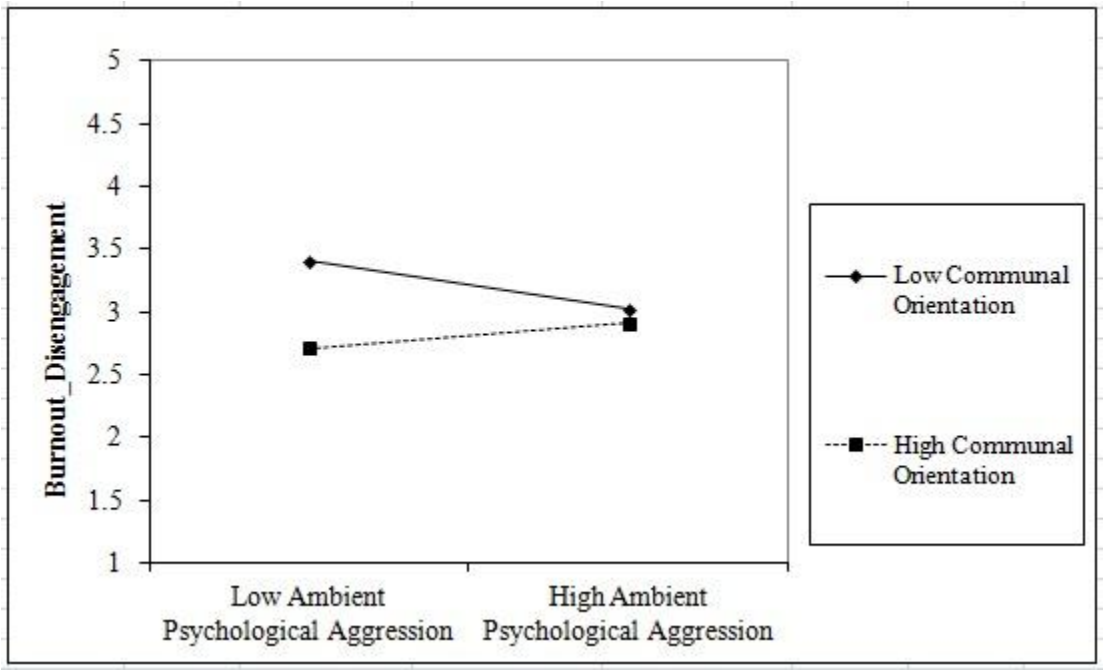


Figure 11. Supplemental Analysis: Ambient Psychological Aggression and Communal Orientation Interaction



APPENDIX A

Violence Prevention Climate Scale
Kessler et al. (2008).

1 = strongly disagree
2 = moderately disagree
3 = slightly disagree
4 = slightly agree
5 = moderately agree
6 = strongly agree

My school provides adequate assault/violence prevention training.
Administration in this school district requires each principal to help reduce violence in his/her school.
Administration encourages employees to report physical violence.
Administration encourages employees to report verbal violence.
Reports of workplace violence from other employees are taken seriously by administration.
Abusive behavior is not tolerated at work.
My administrator provides adequate assault/violence prevention policies.
My administrator provides adequate assault/violence prevention procedures.
In my school, violence prevention procedures are detailed.
In my school, employees are informed about potential violence hazards.
In my school, there is training on violence prevention policies and procedures.
In my school, information about violence prevention is distributed regularly.
In my school in order to get the work done, one must ignore some violence prevention policies.
In my school, whenever pressure builds up, the preference is to do the job as fast as possible, even if that means compromising violence prevention.
In my school, human resource shortage undermines violence prevention standards.
In my school, violence prevention policies and procedures are ignored.
In my school, violence prevention policies and procedures are nothing more than a cover-up for lawsuits.
In my school, ignoring violence prevention procedures is acceptable.

APPENDIX B

Workplace Aggression Scale
Yang (2009)

1= never
2 =once or twice
3 = a few times
4 = monthly
5 = weekly
6=daily

[1]Physical aggression
[2]Psychological/verbal aggression

Been hit with an object[1]
Been assaulted with weapon (e.g. knife, gun, etc.)[1]
Been punched or kicked[1]
Been slapped[1]
Been pushed, grabbed, or shoved[1]
Been bitten[1]
Been spat upon[1]
Been yelled or shouted at[2]
Been threatened verbally or in a written message or note (including e-mail)[2]
Had something thrown at you[1]
Been insulted[2]

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Yang (2009)

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Been yelled or shouted at[2]
Been threatened verbally or in a written message or note (including e-mail)[2]
Had something thrown at you[1]
Been insulted[2]

APPENDIX C

Duttweiler Internal Control Index
Duttweiler (1984).

1 = Rarely (less than 10% of the time)
2 = Occasionally (about 30% of the time)
3= Sometimes (about 50% of the time)
4= Frequently (about 70% of the time)
5= Usually (more than 90% of the time)

When faced with a problem, I _____ try to forget it.
I ____ need frequent encouragement from others for me to keep working at a difficult task.
I _____ like jobs where I can make decisions and be responsible for my own work.
I ___ change my opinion when someone I admire disagrees with me.
If I want something I ____ work hard to get it.
I _____ prefer to learn the facts about something from someone else rather than have to dig them out for myself.
I will ____ accept jobs that require me to supervise others.
I ____ have a hard time saying "no" when someone tries to sell me something I don't want.
I ___ like to have a say in any decisions made by any group I'm in.
I ____ consider the different sides of an issue before making any decisions.
What other people think _____ has a great influence on my behavior.
Whenever something good happens to me I ____ feel it is because I've earned it.
I ___ enjoy being in a position of leadership.
I ____ need someone else to praise my work before I am satisfied with what I have done.
I am ____ sure enough of my opinions to try and influence others.
When something is going to affect me I ____ learn as much about it as I can.
I ___ decide to do things on the spur of the moment.
For me, knowing I've done something well is ____ more important than being praised by someone else.
I ___ let other people's demands keep me from doing things I want to do.
I ____ stick to my opinions when someone disagrees with me.
I _____ do what I feel like doing, not what other people think I ought to do.

I ___ get discouraged when doing something that takes a long time to achieve results.
When part of a group I ____ prefer to let other people make all the decisions.
When I have a problem I _____ follow the advice of friends or relatives.
I ___ enjoy trying to do difficult tasks more than I enjoy trying to do easy tasks.
I ____ prefer situations where I can rely on someone else's ability rather than just my own.
Having someone important tell me I did a good job is ____ more important to me than feeling I've done a good job.
When I'm involved in something I ____ try to find out all I can about what is going on even if someone else is in charge.

APPENDIX D

Communal Orientation Scale
Clark et al. (1987)

1= extremely uncharacteristic of me
2 = slightly uncharacteristic of me
3 = neutral
4 = slightly characteristic of me
5 = extremely characteristic of me

**reversed*

It bothers me when other people neglect my needs.
When making a decision, I take other people's needs and feelings into account.
I'm not especially sensitive to other people's feelings.*
I don't consider myself to be a particularly helpful person.*
I believe people should go out of their way to be helpful.
I don't especially enjoy giving others aid.*
I expect people 1 know to be responsive to my needs and feelings.
I often go out of my way to help another person.
I believe it's best not to get involved taking care of other people's personal needs.*
I'm not the sort of person who often comes to the aid of others.*
When I have a need, I turn to others I know for help.
When people get emotionally upset, I tend to avoid them.*
People should keep their troubles to themselves.*
When I have a need that others ignore, I'm hurt.

APPENDIX E

Oldenburg Burnout Inventory (OLBI)
Demerouti et al. (2001)

1 = strongly disagree
2 = moderately disagree
3 = slightly disagree
4 = slightly agree
5 = moderately agree
6 = strongly agree

**reversed*

I always find new and interesting aspects in my work.*
There are days when I feel tired before I arrive at work.
It happens more and more often that I talk about my work in a negative way.
After work, I tend to need more time than in the past in order to relax and feel better.
I can tolerate the pressure of my work very well.*
Lately, I tend to think less at work and do my job almost mechanically.
I find my work to be a positive challenge.*
During my work, I often feel emotionally drained.
Over time, one can become disconnected from this type of work.
After working, I have enough energy for my leisure activities.*
Sometimes I feel sickened by my work tasks.
After my work, I usually feel worn out and weary.
This is the only type of work that I can imagine myself doing.*
Usually, I can manage the amount of my work well.*
I feel more and more engaged in my work.*
When I work, I usually feel energized.*

REFERENCES

Aiken, L. S., West, S. G., Luhmann, M., Baraldi, A., & Coxe, S. J. (2012). In: *APA handbook of research methods in psychology, Vol 3: Data analysis and research publication.* Cooper, Harris (Ed.); Camic, Paul M. (Ed.); Long, Debra L. (Ed.); Panter, A. T. (Ed.); Rindskopf, David (Ed.); Sher, Kenneth J. (Ed.); pp. 101-129. Washington, DC, US: American Psychological Association.

Bakker, A. B., Van Der Zee, K. I., Lewig, K. A., & Dollard, M. F. (2006). The relationship between the Big Five personality factors and burnout: a study among volunteer counselors. The Journal of social psychology, 146(1), 31-50.

Barling, J., Rogers, A., & Kelloway, E. (2001). Behind closed doors: In-home workers' experience of sexual harassment and workplace violence. *Journal of Occupational Health Psychology*, *6*, 255-269.

Baron, R. A. (1977). *Human aggression.* New York: Plenum Press.

Baron, R. A., & Neuman, J. H. (1996). Workplace violence and workplace aggression: Evidence on their relative frequency and potential causes.. *Aggressive behavior*, *22*(3), 161-173.

Baumeister, R. F., Smart, L., & Boden, J. M. (1996). Relation of threatened egotism to violence and aggression: the dark side of high self-esteem. Psychological review, 103(1), 5.

Beehr, T. A., & Newman, J. (1978). Job stress, employee health, and organizational effectiveness: a facet analysis, model, and literature review. *Personnel Psychology, 3*, 665-699.

Bentley, R. R., & Remble, A. M. (1967). *Manual for the Purdue Teacher Opinnionnaire,*

Purdue University Press. West Lafayette. Indiana.

Braverman, M. (1999). *Preventing workplace violence: A guide for employers and practitioners.* Thousand Oaks, CA: Sage.

Bridges. E. M. (1980). Job satisfaction and teacher absenteeism. *Education Administration Quarterly, 16,* 41-46.

Bruce, M. D., & Nowlin, W. A.. (2011). Workplace violence: awareness, prevention and response. *Public Personnel Management, 40*, 293-308.

Budd, J. W., Arvey, R. D., & Lawless, P. (1996). Correlates and consequences of workplace violence. *Journal of Occupational Health Psychology*, *1*(2), 197-210.

Caplan, R., Cobb, S., French, J., Van Harrison, R., & Pinneau, S. (1975). Demands and worker health: Main effects and organizational differences. Washington, DC: US Government Printing Office.

Carr, J. Z., Schmidt, A. M., Ford, J. K., & DeShon, R. P. (2003). Perceptions matter: A meta-analytic path analysis relating molar climate, cognitive and affective states, and individual level work outcomes. *Journal of Applied Psychology, 88(4)*, 605-619.

Carroll, T. G. (2007). Policy brief: The high cost of teacher turnover. *National Commission on Teaching and America's Future*.

Center for the Prevention of School Violence. (2000). *A vision for safer schools*. Raleigh, NC: Author.

Chappel, A. M., Loker, T., McMahan, M. M., & Suldo, S. M. (2012). Relationships between perceived school climate and adolescent mental health across genders, *School Mental Health. 4.2*, 69-80.

Clarke, Sharon. (2010). An integrative model of safety climate: Linking psychological climate and work attitudes to individual safety outcomes using meta-analysis. *Journal of Occupational and Organizational Psychology, 83(3*), 553-578.

Clark, M. S., Ouellette, R., Powell, M. C., & Milberg, S. (1987). Recipient's mood, relationship type, and helping. *Journal of Personality and Social Psychology, 53,* 94 - 103.

Coughlan, R. J. (1969). The factorial structure of teacher work values. *American Educational Research Journal, VI*, 169-189.

Cordes, C. L., & Dougherty, T. W. (1993). A review and an integration of research on job burnout. *Academy of management review*, 621-656.

Cronbach, L. J., & Gleser, G. C. (1957). *Psychological tests and personnel decisions.* Champaign: University of Illinois Press.

Dawson, J. F. (2014). http://www.jeremydawson.co.uk/slopes.htm

Dawson, J. F. (2014). Moderation in management research: What, why, when and how. *Journal of Business and Psychology, 29, 1-19.*

Demerouti, E., Bakker, A., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology, 86,* 499-512.

D'arienzo, R. V., Murraco, J. C., & Krajewski, R. J. (1982). *Stress in Teaching,* University of America Inc.

D'Augelli, A. R., Pietrantoni, L., & Prati, G. (2011). Aspects of Homophobia in Italian High Schools: Students' Attitudes and Perceptions of School Climate. *Journal of Applied Social Psychology, 41.11*, 2600-2620.

Dorsey, J. (2000). Institute to End School Violence. http://www.endschoolviolence.com/strategy/

Dowrkin, A. G. (1980). The changing demography of public school teachers: Some applications for faculty turnover in urban areas. *Sociology of Education,* 53 (2), 65-73.

Deary, I. J., Watson, R., & Hogston, R. (2003). A longitudinal cohort study of burnout and attrition in nursing students. Journal of Advanced Nursing, 43, 71-81.

Duttweiler, P. C. (1984). The internal control index: A newly developed measure of locus of control. *Educational and Psychological Measurement, 44,* 209-221.

Farmer, G. L. (1999). Disciplinary Practices and Perceptions of School Safety, *Journal of Social Service Research, 26:1*, 1-38.

Freudenberger, H. J. (1974). Staff burnout. *Journal of Social Issues*, *30*, 159 - 165.

Gerberich, S.G., Church, T.R., McGovern, P.M., Hansen, H.E., Nachreiner, N.M., Geisser, A.D., Ryan, A.D., & Mongin, S.J. (2004). An epidemiological study of the magnitude and consequences of work related violence: The Minnesota nurses' study. *Occupational Environmental Medicine, 61*, 495-503.

Gil-Monte, P. R., Carlotto, M. S., & Câmara, S. G. (2011). Prevalence of burnout in a sample of Brazilian teachers. *The European Journal of Psychiatry, 25(4),* 205-212.

Gottfredson, D. (1989). Developing effective organizations to reduce school disorder. In O. Moles (Ed.), *Strategies to reduce student misbehavior*, 87-104. Washington, DC: Office of Educational Research and Improvement.

Green, D. E., Walkey, F. H., & Taylor, A. J. W. (1991). The three-factor structure of the Maslach Burnout Inventory. *Journal of Social Behavior and Personality, 6,* 453-472.

Guion, R. M. (1973). A note on organizational climate. *Organizational Behavior and Human Performance, 9,* 120-125.

Ha, J., King, K. M., & Naeger, D. J. (2011). The impact of burnout on work outcomes among South Korean physical education teachers. *Journal of Sports Behavior, 34(4),* 343-357.

Halbesleben, J. R. B., & Buckley, M. R. (2004). Burnout in organizational life. *Journal of Management, 30,* 859 – 879.

Haselkorn, D., & Harris, L. (2001). *The Essential Profession: American Education at the Crossroads. A National Survey of Public Attitudes toward Teaching, Educational Opportunity and School Reform.*

Hazler, R. J., Hoover, J. H., & Oliver, R. L. (1996). Student perceptions of victimization by bullies in schools. *The Journal of Humanistic Education and Development, 29,* 143-150.

Hellriegel, D., & Slocum, J. W. (1974). Organizational climate: Measures, research and contingencies. *Academy of Management Review, 17,* 255-280.

Hendrix, W. H., Ovalle, N. K., & Troxler. G. R. (1985). Behavioral and psychological consequences of stress and its antecedent factors. *Journal of Applied Psychology,* 70, 188-20.

Humphrey, J. H., & Humphrey, J. N. (1981). Factors which induce stress in teachers. *Stress, 2,* 11-15.

Ingersoll, R. M. (2011). Teacher turnover and teacher shortages: An organizational analysis. *American Educational Research Journal, 38,* 499-534.

James, L. R., & Jones, A. P. (1974). Organizational climate: a review of theory and research. *Psychological Bulletin, 81*, 1096-1112.

Jenkins, J. M. (1993). Self-monitoring and turnover: The impact of personality on intent to leave. *Journal of Organizational Behavior, 14(1),* 83-91.

Kahill, Sophia. (1988). Symptoms of professional burnout: A review of the empirical evidence. *Canadian Psychology, 29*, 284-297.

Kahn, R.L., & Byosserie, P. (1992), Stress in organizations, in Dunette, M.D. and Hough, L.M. (Eds), *Handbook of Industrial and Organizational Psychology, Vol. 3*, Consulting Psychologists Press, Palo Alto, CA, pp. 571-650.

Karasek Jr, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. Administrative science quarterly, 285-308.

Kessler, S.R., Spector, P.E., Chang, C.H., & Parr, A.D. (2008). Organizational violence and aggression: Development of the three-factor Violence Climate Survey. *Work & Stress, 22*, 108-124.

Kransz, M., Koslowsky, M., Shalom, N., & Elyakim, N. (1995). Predictors of intentions to leave the ward, the hospital, and the nursing profession: a longitudinal study. *Journal of Organisational Behaviour,16 (3),* 277-288.

Lachman, R., & Aranya. N. (1986). Job related attitudes and turnover intentions among professionals in different work settings. *Organization Studies,* 7(3). 279-293.

Lanza, M. (2006). Violence in nursing. In E. K. Kelloway, J. Barling, & J. J. Hurrell, Jr. (Eds), *Handbook of workplace violence* (pp. 147-167). Thousand Oaks, CA: Sage.

Lazarus, R. S., & Folkman, S. (1984). Stress. Appraisal, and coping, 456.

LeBlanc, M. M., & Barling, J. (2005). Understanding the many faces of workplace violence. Chapter in S. Fox, & P. E. Spector (Eds.), *Counterproductive workplace beahavior: An integration of both actor and recipient perspectives on causes and consequences.* Washington, DC: American Psychological Association.

LeBlanc, M. M., & Kelloway, E. K. (2002). Predictors and outcomes of workplace violence and aggression. *Journal of Applied Psychology, 87*(3), 444.

Lee, R. T., & Ashforth, B. E. (1993). A longitudinal study of burnout among supervisors and managers: Comparisons between the Leiter and Maslach (1988) and Golembiewski et al. (1986) models. *Organizational Behavior and Human Decision Processes, 54,* 369–398.

Lee, R. T., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. Journal of applied Psychology, 81(2), 123.

Leiter, M. P., & Maslach, C. (1998). Burnout. In H. Friedman (Ed.), *Encyclopedia of mental health,* 202–215. New York: Academic Press.

Levenson, H. (1981). Differentiating among Internality, Powerful Others, and Chance. In Lefcourt, H. M. *Research with locus of control, Vol. 1, Assessment Method,* 15-63. New York: Academic Press.

Magnavita, N., & Heponiemi, T. (2011). Workplace violence against nursing students and nurses: An Italian experience. *Journal of Nursing Scholarship, 43*, 203-210.

Macik-Frey, M., Quick, J. C., & Nelson, D. L. (2007). Advances in Occupational Health: From a Stressful Beginning to a Positive Future. Journal of Management, 33(6), 809-840.

Maslach, C. (1976). Burned out. *Human Behavior*, *5*, 16-22.

Maslach, C. (1982). *Burnout: The cost of caring*. Englewood Cliffs, NJ: Prentice-Hall.

Maslach, C., & Schaufeli, W. B. (1993). Historical and conceptual development of burnout. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research*, 1–18). New York, NY: Taylor & Francis.

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology, 52*, 397– 422.

Merchant, J. A., & Lundell, J. (2001). Workplace violence intervention research workshop, April 5–7, 2000, Washington, DC: Background, rationale, and summary. *American Journal of Preventive Medicine, 20,* 135–140.

Michael, J. H., Evans, D. D., Jansen, K. J., & Haight, J. M. (2006). Management commitment to safety as organizational support: Relationships with non-safety outcomes in wood manufacturing employees, *Journal of Safety Research, 35*, 171-179.

Mobley, W. H., Griffeth, R. W., Hand, H. H., & Meglino, B. M. (1979). Review and conceptual analysis of the employee turnover process. *Psychological bulletin, 86(3),* 493-522.

Montero-Marín, J., García-Campayo, J., Fajó-Pascual, M. Miguel Carrasco, J. Gascón, S. Gili, M., & Mayoral-Cleries, F. (2011). Sociodemographic and occupational risk factors associated with the development of different burnout types: the cross-sectional University of Zaragoza study, *BMC Psychiatry*, 11-49.

Mowday, R.T., Koberg, C. S, & McArthur. A. W. (1984). The psychology of the withdrawal process. *Academy of Management Journal.* 27 (I), 79-94.

Moya-Albiol, L., Serrano, M. A., & Salvador, A. (2010). Job Satisfaction and cortisol awakening response in teachers scoring high and low on burnout. *The Spanish Journal of Psychology, 13,* 629-636.

National Commission on Teaching and America's Future. (2007b). *The cost of teacher turnover in five school districts.* Washington, DC: Author.

Neal, A., & Griffin, M. A. (2006). A study of the lagged relationships among safety climate, safety motivation, safety behavior, and accidents at the individual and group levels. *Journal of Applied Psychology, 91,* 946–953.

Neal, A., Griffin, M. A., & Hart, P. M. (2000). *Safety Science, Vol 34(1-3),* 99-109.

Neuman, J. H., & Keashly, L. (2004). Development of the Workplace Aggression Research Questionnaire (WAR-Q): Preliminary data from the Workplace Stress and Aggression Project. In R. J. Bennett & C. D. Crossley (Chairs), *Theoretical advancements in the study of anti-social behavior at work.* Symposium to be conducted at the meeting of the Society for Industrial and Organizational Psychology, Chicago, IL.

Perlman, B., & Hartman, E. A. (1982). Burnout: Summary and future research. *Human Relations, 35,* 283 - 305.

Piedmont, R. L. (1993). A longitudinal analysis of burnout in the health care setting: The role of personal dispositions. Journal of Personality Assessment, 61, 457-473.

Pines, A. (1982). Changing organizations: Is a work environment without burnout an impossible goal? In W. S. Paine (Ed.), Job stress and bumout (pp. 189-211). Beverly Hills, CA: Sage.

Porter, L. W., & Steers. R, M. (1973). Organizational, work, and personal factors in employee turnover and absenteeism, *Psychological Bulletin, 80,* 151-176.

Power calculator. (http://www.raosoft.com/samplesize.html)

Price, J. L., & Mueller. C. W. (1981). A causal model of turnover for nurses. *Academy of Management Journal, 24 (3),* 543-565.

Probst, T. M. (2004). Safety and insecurity: Exploring the moderating effect of organizational safety Climate. *Journal of Occupational Health Psychology,* 9, 3-10.

Rasmussen, K., Glasscock, D. J., Hansen, O. N., Cartsense, O., Jepsen, J. F., & Nielsen, K. J. (2006). Worker participation in change processes in a Danish industrial setting. *American Journal of Industrial Medicine, 49,* 767–779.

Reichers, A. E., & Schneider, B. (1990). Climate and culture: An evolution of constructs. In B. Schneider (Ed.), *Organizational climate and culture*, 5–39. San Fransico, CA: Jossey- Bass.

Rentsch, J. R. (1990). Climate and culture: Interaction and qualitative differences in organizational meanings. *Journal of Applied Psychology, 75,* 668-681.

Rogers, K. A., & Kelloway, E. K. (1997). Violence at work: personal and organizational outcomes. *Journal of Occupational Health Psychology, 2*(1), 63.

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs,* 80, whole issue.

Schat, A. C., Frone, M. R., & Kelloway, E. K. (2006). Prevalence of Workplace Aggression in the US Workforce: Findings from a National Study.

Schat, A. C., & Kelloway, E. K. (2003). Reducing the adverse consequences of workplace aggression and violence: The buffering effects of organizational support. *Journal of Occupational Health Psychology*, 8, 110-122.

Schaufeli, W. B., & Enzmann, D. (1998). *The burnout companion for research and practice: A critical analysis of theory, assessment, research, and Interventions.* London: Taylor & Francis.

Schneider, B. (1975). Organizational climates: An essay. *Personnel Psychology, 28,* 447-479.

Schneider, B. (1990). The climate for service: An application of the climate construct. In B. Scheider (Ed.), *Organizational Climate and Culture*, pp. 383-412. San Francisco: Jossey-Bass.

Schneider, B., Ehrhart, M. G., & Macey, W. H. (2011). In: *APA handbook of industrial and organizational psychology, Vol 1: Building and developing the organization.* Zedeck, Sheldon; Washington, DC, US: American Psychological Association, 373-414.

Sherman, L.W., Gottfredson, D., MacKenzie, D., Eck, J., Reuter, R., & Bushway, S. (Eds.). (1997). *Preventing crime: What works, what doesn't, what's promising*. Washington, DC: U.S. Department of Justice, Office of Justice Programs.

Shirom, A. (1989). Burnout in work organizations.

Spector, P. E., Coulter, M. L., Stockwell, H. G., & Matz, M. W. (2007). Perceived violence climate: A new construct and its relationship to workplace physical

violence and verbal aggression, and their potential consequences. *Work & Stress, 21,* 117-130.

Spector, P., & Jex, S. (1998). Development of Four Self-Report Measures of Job Stressors

and Strain: Interpersonal Conflict at Work Scale, Organizational Constraints Scale, Quantitative Workload Inventory, and Physical Symptoms Inventory. *Journal of Occupational Health Psychology, 3,* 356-367.

Swider, B. W., & Zimmerman, R. D. (2010). Born to burnout: A meta-analytic path model of personality, job burnout, and work outcomes. *Journal of Vocational Behavior, 76,* 487–506.

Taris, T. W. (2006). Is there a relationship between burnout and objective performance? A critical review of 16 studies. *Work and Stress, 20,* 316–334.

Taylor, J. L. & Rew, L. (2011). A systematic review of the literature: Workplace violence in the emergency department. *Journal of Clinical Nursing, 20,* 1072-1085.

Talebpour, M., Emami, F., Bahmanpour, H., & Nasiri, M. (2012). The Relationship between Organizational Citizenship Behavior and Job Burnout in the Faculty Members of Physical Education. *Advances in Environmental Biology*, *6*(5).

Truchot, D. (2009). The burnout syndrome among GP: Influence of perceived inequity and communal orientation, *Annales Me´dico-Psychologiques, 167,* 422–428.

Useem, E., Offenberg, R., & Farley, E. (2007). Closing the Teacher Quality Gap in Philadelphia: New Hope and Old Hurdles. The Third Study of Teacher Quality in Philadelphia. A Report from" Learning from Philadelphia's School Reform". *Research for Action*.

U.S. Postal Service Commission on a Safe and Secure Workplace. (2000). *Report of the United States Postal Service Commission on a Safe and Secure Workplace.* New York: Columbia University, National Center on Addiction and Substance Abuse.

Vanderslice, Ronna. (2010). Annual Theme 2010: ABC's of Keeping the Best. *Childhood Education*.

Van Yperen, N. W. (1996). Communal orientation and the burnout syndrome among nurses: A replication and extension. *Journal of Applied Social Psychology, 26,* 338-354.

Van Yperen, N. W., Buunk, B. P., & Schaufeli, W. B. (1992). Communal orientation and the burnout syndrome among nurses. *Journal of Applied Social Psychology, 22,* 173-189.

Wallace, J. C., Edwards, B. D., Arnold, T., Frazier, M. L., & Finch, D. M. (2009). Work stressors, role-based performance, and the moderating influence of organizational support. Journal of Applied Psychology, 94(1), 254.

Welsh, W. (2000).The effects of school climate on school disorder. *Annals of the American Academy of Political and Social Science, 567,* 88-107.

Wu, Y., Li, W., Wang, P., & Gao, F. (2011). Mediating effect of organizational commitment on relationship between professional college teachers' personality characteristics and job burnout. *Chinese Mental Health Journal, 25(7*), 533-537.

Xanthopoulou, D., Bakker, A., Demerouti, E., & Schaufeli, W.B. (2007). The role of personal resources in the job demands-resources model. International *Journal of Stress Management, 14,* 121-141.

Yang, L. Q. (2009). Aggression and its consequences in nursing: A more complete story by adding its social context. *Theses and Dissertations,* Paper 96.

Zohar, D. (2000). A group-level model of safety climate: Testing the effect of group climate on microaccidents in manufacturing jobs. *Journal of Applied Psychology, 85,* 587-596.

ABSTRACT

THE EFFECT OF ORGANIZATIONAL VIOLENCE PREVENTION CLIMATE AND WORKPLACE AGGRESSION WITHIN SCHOOLS: AN INVESTIGATION OF BURNOUT SYNDROME IN TEACHERS AND THE MODERATING EFFECT OF LOCUS OF CONTROL, COMMUNAL ORIENTATION, AND VIOLENCE PREVENTION CLIMATE

by

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Major: Psychology (Industrial and Organizational)

Degree: Master of Arts

In accordance with the Job Demands-Resources model (Demerouti et al., 2001) and other related research (e.g. Bakker et al., 2006), the effect of overwhelming job demands to contribute to burnout can be mitigated by the presence of organizational resources and personal resources. This study examined the direct effects of three types (different perpetrators) of psychological and physical workplace aggression on burnout in teachers; as well as the moderating effects of teacher perceptions of violence prevention climate dimensions, LOC, and communal orientation in these relationships. Findings indicated that ambient physical aggression and Type III psychological aggression were significant predictors of overall burnout. Relationships between both Type II and ambient psychological aggression and burnout were moderated by perceptions of the practices and response dimension of VPC. Supplemental analyses uncovered additional

main effects and moderations when examining the relationships between workplace aggression and the individual dimensions of burnout (disengagement and exhaustion).

AUTOBIOGRAPHICAL STATEMENT

Niambi M. Childress received her Bachelor of Arts in Communications from Oakland University in 2007. She later pursued post-baccalaureate training in psychology at Wayne State University, during which time she also gained research experience as an undergraduate research assistant in the laboratories of both Dr. Kimberly O'Brien and Dr. Sebastiano Fisicaro. She is now a doctoral student in Industrial/Organizational Psychology, at Wayne State University, working under Dr. Alyssa McGonagle. Her major area of interest is Occupational Health Psychology, and her research focuses primarily on workplace safety, occupational health, and workplace incivility. Since in the doctoral program, she has been employed as a Graduate Research Assistant under Dr. Alyssa McGonagle; a Graduate Teaching Assistant for both undergraduate and graduate level psychology and organizational behavior courses at Wayne State University; and most recently, as an intern for both survey strategies and assessments in the Workforce Planning & Analytics department of Human Resources at the Ford Motor Company World Headquarters.